C677
T35b

VOL. 86 NO. 12

Your Supervisors: Pros Or Peons?
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textile bulletin

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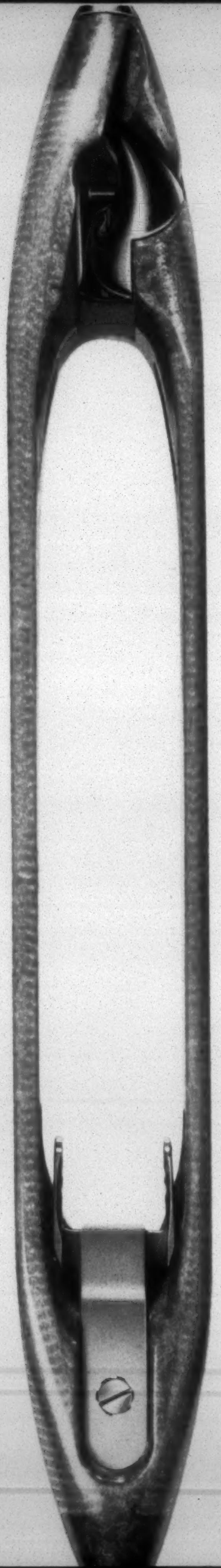
BPA NBP

LOOM PARTS

BAHAN

GREENVILLE, SOUTH CAROLINA



A new record for shuttle life

Draper
Tru-Mold Shuttle
Establishes
Four Year Record
at
Clinton Cotton
Mills

We are justly proud that a Draper Tru-Mold Shuttle established this remarkable record.

The use of superior materials and new manufacturing methods make such shuttle life possible.

For better performance, greater shuttle economy, equip your weave room with Draper Tru-Mold Shuttles.

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DRAPER CORPORATION

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SONOCO
"KNOW-HOW"
IN ACTION

Cone crush strength testing at Sonoco.

Cone testing helps assure your profits!

This machine, for measuring the crushing strength of cones, is one of several testing devices employed by Sonoco to maintain and improve the strict quality standards of cone production. In addition to testing, this machine is used in the development of special cones for Sonoco customers.

The development of a cone for a specific purpose is not a simple procedure. The *correct combination* of paper, adhesives, surface and taper is required to produce a cone that will give dependable, trouble-free performance in winding operations. However, constant Sonoco research, coupled with skilled engineering and modern production facilities, make this customer service a daily routine. And still, Sonoco cones are low priced, making *one-time-use* practical.

Sonoco cones are typical of the dependable products manufactured by a fully integrated company with 60 years' experience in producing all types of paper textile carriers. *Only Sonoco,* in its field, provides the necessary knowledge, skill and capacities to meet the ever-changing techniques of the textile industry. *Let Sonoco experience help you!*

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Products for Textiles

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1491

A Report on the DAN RIVER MILLS Cocker Slasher Installation

In 1959, Dan River Mills integrated their slasher operations as shown in the picture above. These four machines (2 GH and 2 1954 models) have replaced eight other slashers of varying types and ages.

These four Cocker Slashers easily carry a load of 2547 looms, running everything from prints to fancies and stripes—yarn counts 20s to 50s—and from 4700 ends 32/1 to 9540 ends 32/1.

Minimum Loom Beam Width
50 Inches
Maximum Loom Beam Width
107¾ Inches
Maximum Loom Beam Head Diameter
32 Inches

- Large picture shows modern Slasher Room at Dan River Mills, Inc.
- (above) Control panel on double size box gives quick direct readings. Air motors assure precise and even loading of top rolls.
- (left) This view shows the revolutionary Cocker Torque Tube Drive and convenient control panel.

Speeds . . .

Dye Beams up to 150 ypm
Stripes up to 150 ypm
4770 ends 32/1—150 ypm
9540 ends 32/1—79 ypm
Top Operating Speed—150 ypm
Heaviest Production set—79 ypm
Average Production operating on 120 hours per week on shift for shift basis—69,716 lbs. per slasher.

Write for Full Information

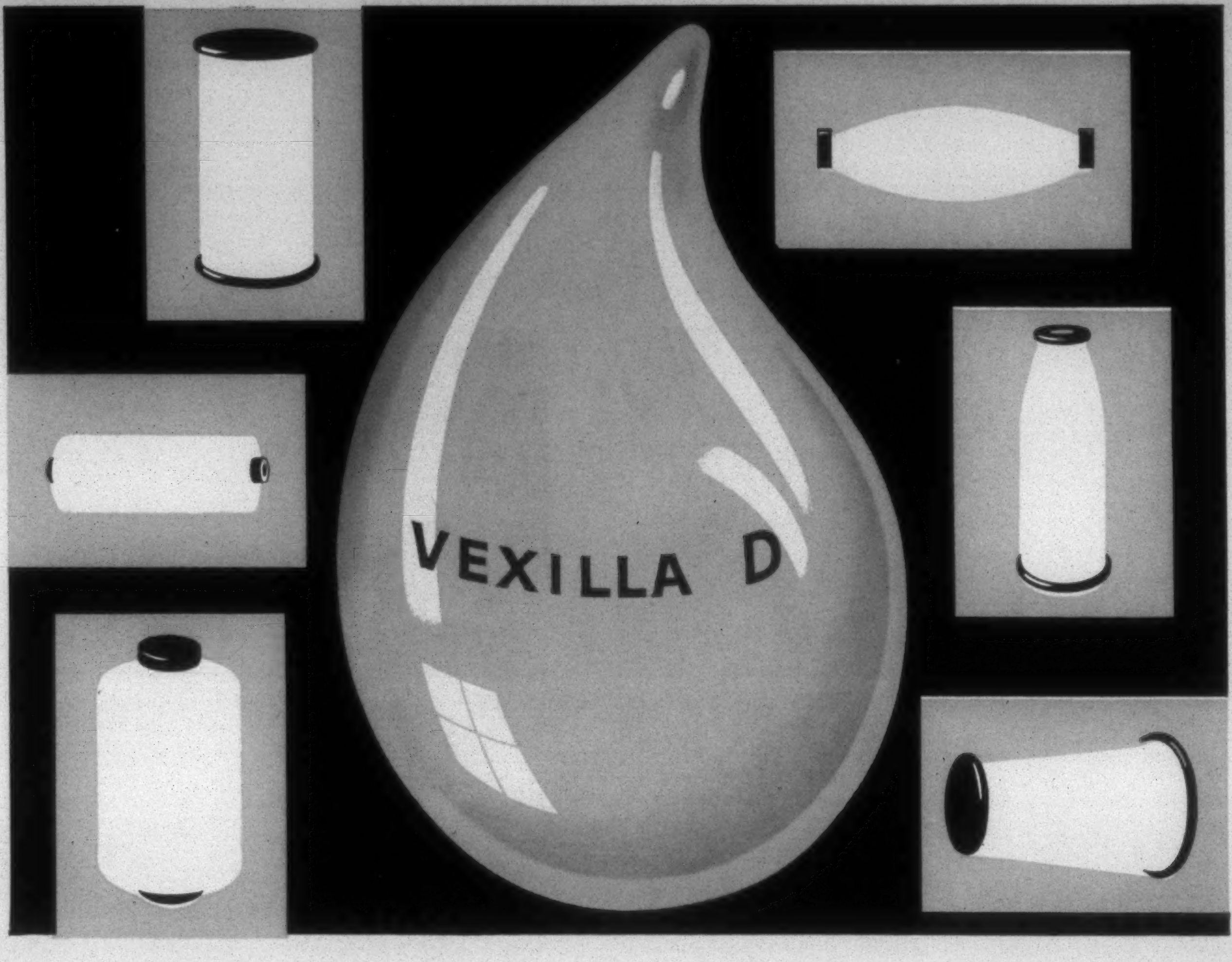
COCKER MACHINE & FOUNDRY COMPANY

IN CANADA:
Contact W. S. Clark
Montreal, Canada
Oxford 7-2242

IN MEXICO:
Ing. J. Via, Jr.
I. La Catolica 45-911
Mexico, D. F.

PLANT & OFFICES
at Ranlo, N. C.
MAILING ADDRESS:
Gastonia, N. C.

WORLD'S LARGEST DESIGNERS AND BUILDERS OF COMPLETE WARP PREPARATORY EQUIPMENT



NEW *DISPERSANT* SPINDLE OILS

for COTTON—WOOL—SYNTHETICS

1. Increase Production. Shell Vexilla D Oils, because of their high film strength and lubricity, permit full-speed operation with heavy packages. They also insure complete lubrication protection to bearings, whether sleeve or anti-friction type.

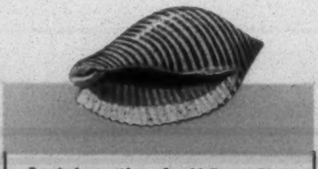
2. Improve Yarn Quality. Vexilla® D Oils will not thicken or gum up like ordinary oils. They constantly cushion spindles against vibration . . . eliminate hunting and logging . . . thereby reduce chafing and assure smoother, more uniformly twisted yarn.

3. Reduce Power Consumption. Vexilla D Oils lower frictional drag in both starting and running.

4. Reduce Spoilage. Vexilla D Oils will not atomize and fog-damage yarn on nearby spindles.

5. Increase Savings . . . especially when processing synthetic yarn. Since Vexilla D Oils have built-in emulsibility, any yarn stained during spinning and up-twisting can be salvaged.

Regardless of the spindles you use, you can expect improved performance with new Shell Vexilla D Oils. Ask the Shell Industrial Products Representative to assist you in selecting the proper grades for your plant. Or write for Technical Bulletin to Shell Oil Company, 50 West 50th Street, New York 20, New York. In Canada: Shell Oil Company of Canada, Limited, 505 University Avenue, Toronto 2, Ontario.



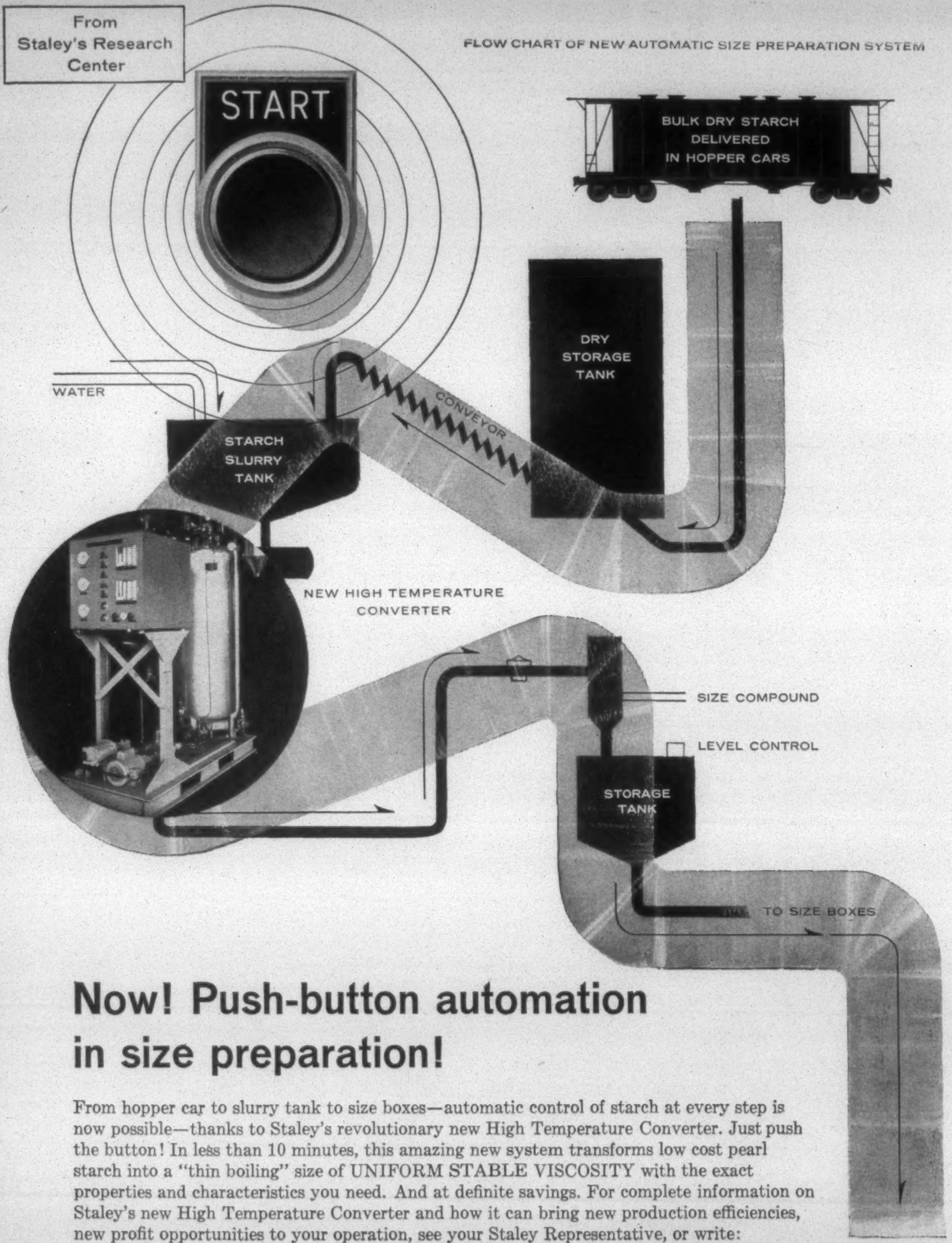
An interesting fact! Every Shell Branded Industrial Lubricant is named for a sea shell. Shown here is the Vexilla taeniata.

NEW

SHELL VEXILLA D OILS

. . . heavy-duty dispersant textile machine lubricants

SHELL


From Staley's Research Center
FLOW CHART OF NEW AUTOMATIC SIZE PREPARATION SYSTEM
START
BULK DRY STARCH DELIVERED IN HOPPER CARS
DRY STORAGE TANK
CONVEYOR
WATER
STARCH SLURRY TANK
NEW HIGH TEMPERATURE CONVERTER
SIZE COMPOUND
LEVEL CONTROL
STORAGE TANK
TO SIZE BOXES

Now! Push-button automation in size preparation!

From hopper car to slurry tank to size boxes—automatic control of starch at every step is now possible—thanks to Staley's revolutionary new High Temperature Converter. Just push the button! In less than 10 minutes, this amazing new system transforms low cost pearl starch into a "thin boiling" size of UNIFORM STABLE VISCOSITY with the exact properties and characteristics you need. And at definite savings. For complete information on Staley's new High Temperature Converter and how it can bring new production efficiencies, new profit opportunities to your operation, see your Staley Representative, or write:

A. E. STALEY MFG. CO.
Decatur, Illinois

ATLANTA • BOSTON • CHICAGO • CLEVELAND • KANSAS CITY • NEW YORK • PHILADELPHIA • SAN FRANCISCO • ST. LOUIS

gdc dyes for synthetics... ready reference dye application chart

developed to fulfill individual fiber requirements

DYE	TYPE	FIBERS†																
		Acetate	Acrilan(1)	Acrilan 16(1)	Arnel(2)	Corval(3)	Creslan(4)	Dacron 54(5)	Dacron 64(5)	Darvan(2)	Dynel(6)	Kodel(7)	Nylon	Orlon(5)	Topel(3)	Verel(7)	Vycron(8)	Zefran(9)
Acid Alizarine Anthralan® Genalan® Sulphon® Supramine® Supranol®	ACID		■				■			■	■		■	■				■
Palatine®	ACID METALIZED		■				■			■			■					
Naphthol Fast Color Bases	AZOIC	■	■		■	■		■	■	■		■	■		■		■	■
Genacryl®	CATIONIC (Basic)		■	■			■		■	■	■			■		■		
Benzofix® Fastusol®	DIRECT					■							■		■			■
Diaminogen® Diazo Oxydiaminogen® Zambesi®	DIRECT, DEVELOPED					■						■			■			■
Celliton® Genacron®	DISPERSE	■	■	■	■		■	■	■	■	■	■	■	■		■	■	
Cellitazol®	DISPERSE, DEVELOPED	■	■		■		■	■	■	■	■	■	■	■			■	
Anthracene Chrome Chromogene® Chromoxane®	MORDANT ACID (Chrome)		■				■			■			■					
Supralan®	NEUTRAL METALIZED		■				■				■		■			■		■
Indo Carbon® Katigen®	SULFUR					■									■			■
Algol® Indanthrene®	VAT					■		■							■			■
Algosol®	VAT ESTER (Soluble)		■			■		■							■			■

To help you keep abreast of new dyeing procedures, we have just completed a new 90-page booklet, "The Dyeing of Synthetic Fibers." For your copy, write direct or call the GDC Service Representative nearest you.

†Company Trademarks: (1) Chemstrand Corporation; (2) Celanese Corporation of America; (3) Courtaulds (Alabama), Inc.; (4) American Cyanamid Co.; (5) E. I. du Pont de Nemours & Co.; (6) Union Carbide Chemicals Co., Div., Union Carbide Corporation; (7) Eastman Chemical Products, Inc.; (8) Beaunit Mills, Inc.; (9) Dow Chemical Co.

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A SALES DIVISION OF

GENERAL ANILINE & FILM CORPORATION

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PROVIDENCE • SAN FRANCISCO • IN CANADA: CHEMICAL DEVELOPMENTS OF CANADA LTD., MONTREAL

A Big Twister to do a Big job — with all the advantages of **big, Big, BIG** packages.

Men who think BIG

choose the WHITIN COMMODORE® Twister

The COMMODORE is designed to do just one job — heavy-duty, coarse yarn twisting, and to do it more *profitably* for you.

The COMMODORE is ideal for twisting a wide variety of plied, heavy and coarse yarns such as tufted-rug yarns, carpet yarns, duck, tire cord, fish-net cord and paper.

* * * * * * * *

With a 12" traverse and giant rings up to 8½" in diameter set in heavy steel ring rails, it is capable of processing yarns as coarse as 45,000 denier on packages holding as much as 11.0 lbs. of yarn. The COMMODORE has a rugged, solidly-built frame — a frame that can carry its tremendous loads without flinching. It is liberally equipped with anti-friction bearings, has precision-cut gearing and a sturdy pulley-type tape drive. Extra heavy ball bearing spindles mounted in cast iron spindle rails easily rotate these heavy packages at speeds reaching 4000 R.P.M.

Of particular interest to woolen yarn and carpet mills is the famous Whitin selective-type trap motion. It is available as optional equipment and can accommodate up to 6 ends. Proven on scores of installations, it has established an industry-wide reputation for efficient, positive and trouble-free operation.

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WHITIN MACHINE WORKS

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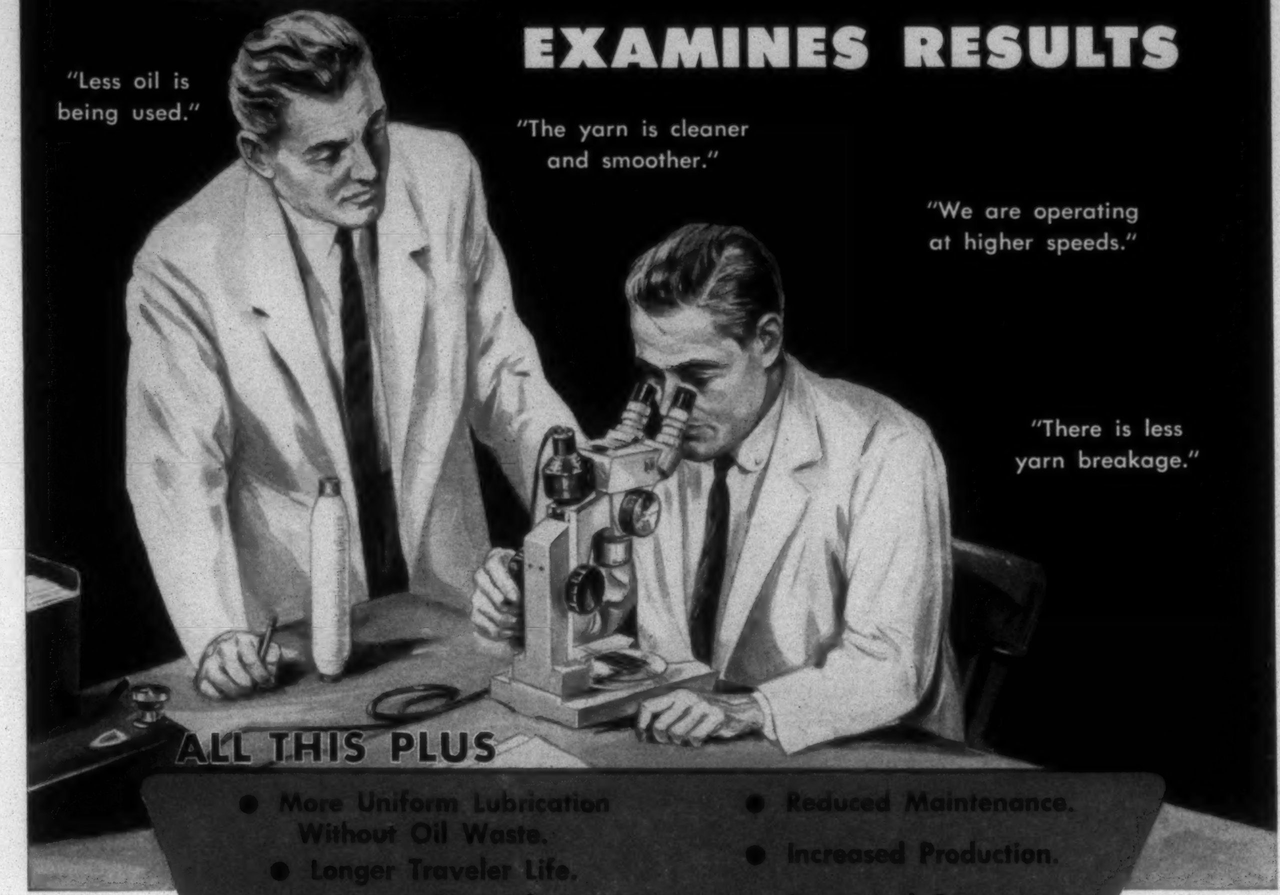
A USER OF THE NEW "M" TYPE HERR CONICAL RING EXAMINES RESULTS


"Less oil is being used."
"The yarn is cleaner and smoother."
"We are operating at higher speeds."
"There is less yarn breakage."

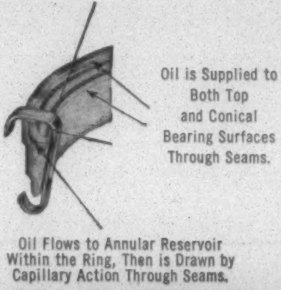
ALL THIS PLUS

- More Uniform Lubrication Without Oil Waste.
- Longer Traveler Life.
- Longer Ring Life.
- Reduced Maintenance.
- Increased Production.
- Decreased Costs.

Now, "M" Type Herr Conical Rings introduce a new method of lubrication called Seam Lubrication. By the principle of capillary attraction oil finds its way from the reservoir through the top and side seams to the wearing surfaces. The minute seams, so fine that they are hardly visible, control the amount of flow so that every drop of oil is utilized. There is no waste—no oil surplus to contaminate the yarn. The operation is clean. There is no rewicking. Maintenance costs are lowered. Oil consumption is greatly reduced, yet faster spindle speeds are possible without extra wear to ring or traveler.

The "M" type Herr Ring has been thoroughly tested for several years in some of the largest textile plants.

Write today. Let us give you all the facts that lead to greater profits for you.


Oil is Supplied to Both Top and Conical Bearing Surfaces Through Seams.
Oil Flows to Annular Reservoir Within the Ring, Then is Drawn by Capillary Action Through Seams.

The 5" diameter 43/64" face Herr "M" Type Ring has only one oil cup. Herr travelers are specially designed to provide best results with this ring.

HERR MANUFACTURING CO., INC.
312 FRANKLIN STREET • BUFFALO 2, N. Y.

FOR SPINNING AND TWISTING WORSTED, WOOLEN, RAYON, NYLON, ORLON, FIBERGLASS AND BLENDED YARNS OF ALL TYPES

A JACQUES WOLF

Chemical

for every processing need!

For any stage of textile processing, Jacques Wolf & Co. has a complete line of chemicals and specialties. Whatever your particular problem, we shall welcome the opportunity of submitting samples custom-formulated to meet your needs. Write for our catalog.

JACQUES WOLF & CO.
60 Park Place, Newark, N. J.

HYDROSULFITES

HYDROSULFITE AWC—($NaHSO_2CH_2O.2H_2O$) For stripping and discharge printing.

HYDROSULFITE OF SODA—(Conc.) ($Na_2S_2O_4$) For reduction of vat colors. Non-Dusting.

HYDROSULFITE B Z—($Zn(OH)HSO_2CH_2O$) For stripping wool stock, shoddy, rags.

HYDROZIN®—($(ZnHSO_2CH_2O)_2$) For stripping acetate dyes and discharge printing on acetate dyed grounds.

HYDROSULFITE QD—For rapid dissolving in continuous vat dyeing.

DE-SIZING

AMPROZYME®—For liquefaction of starches and proteins in de-sizing textiles.

DIASTAZYME®—Used as an economical de-sizing agent for starch-sized textiles.

SCOURING

ORATOL® L-48—A synthetic detergent with excellent penetrating and emulsyfing properties.

BENSAPOL—A liquid detergent tderived from Monopole Oil particularly useful for scouring wool.

LOUPOLE W-950—A penetratting detergent for use in scouring or boiling off.

PARNOL—Sodium Dodecyl Benzene Sulphonate.

SELLOGEN® GEL—A synthetic detergent used also in dyeing and as a wetting agent for all natural and synthetic fibre.

DETERGENT W-1750A—Has anionic and non-ionic properties; excellent for scouring nylon and dacron to remove throwster sizings; penetrates and lifts graphite streaks.

DYEING

WETSIT™ CONC.—A synthetic aromatic compound for wetting out in both the dyeing and scouring operations.

WETSIT NI—100% non-ionic wetting agent.

MONOPOLE® OIL—A highly concentrated, double sulphonated castor oil for a wide range of operations.

APASOL®—Particularly effective in the dispersion of acetate printing colors. A sulphonated ester with a high combined SO_3.

LOMAR® PW—Dispersing agent for pad dyed vat colors; also retardant in the dyebath.

SULPHONATED OILS—Castor, Cod, Sperm, Olive, Neatsfoot, Pine, Red, Teaseed, etc.

FINISHING

DILEINE® SERIES—An amino concentrate for the prevention of atmospheric gas fading on dyed acetate fibers.

MELEINE® SERIES—Complex organic nitrogenous compounds used on finishes to protect acetate dyed fabrics from atmospheric gas fading.

STATLESS—Paste for reducing static on all fibres.

CHEAM SOFTENERS—In different strengths and varied degrees of alkalinity for a soft full hand to all types of fabrics.

LUPOMIN®—A series of cationic nitrogen compounds, used for softening and finishing textiles.

CHAFE REMOVER W-545-T—A finishing oil for textiles, particularly silk fabrics, to remove chafe marks.

LUXAPOLE™ W-1054-B—A superior, sulphonated oil for finishing all fine fabrics.

OIL S-261C—A clear, amber oil used as a penetrator and softener for cotton cloth; aids in uniform shrinkage.

SOLUBLE WAX JB—A dispersed vegetable wax for full body and high lustre to cotton goods.

WEIGHTER FINISH M—For heavier body and better hand for all fabrics.

PRINTING

SUPERCLEAR™—Prepared from natural gums as a thickener for printing all types of textiles.

SUPERGUM™—A cold-water soluble gum.

PIGMENT WHITES—Dispersed suspension of white pigments with plasticizers for use on light grounds, or white discharge on dyed ground shades.

ACETATE OF CHROME—As a mordant in dyeing and printing mordant colors. Also for dyeing mineral shades.

TRAGACANTH—Gum solutions in various concentrations for extra clear, sharp prints when used with acid, direct or insoluble Azo dyestuffs.

OTHER SPECIALTIES

Mordants
Defoamers
Sizes
Delustres
Penetrants
Weighting Finishes
Gums—Arabic, Karaya and Tragacanth
Fiber Lubricants
Thickeners
Wool Oils
Sulfonated Oils (various bases)

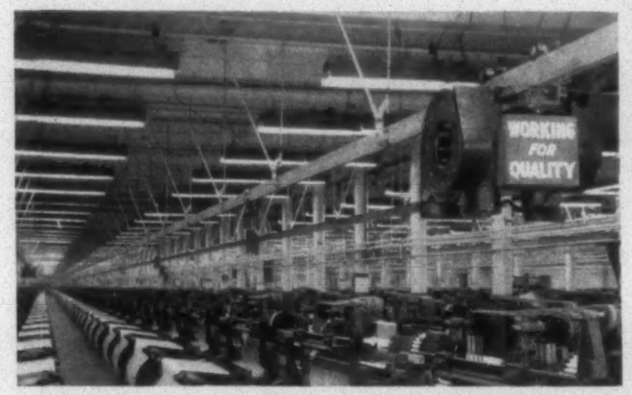
WOLF BRAND ® CHEMICAL SPECIALTIES

JACQUES WOLF & CO.
Chemicals
NEWARK, N.J.
A subsidiary of Nopco Chemical Company

Now...keep your work areas clean automatically, with specially designed Amco Cleaners!

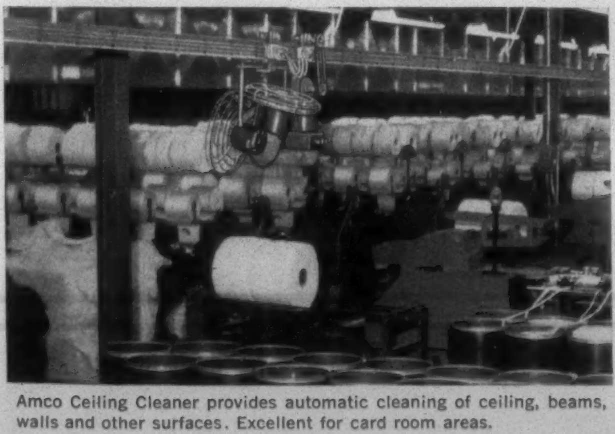
Amco has developed a wide selection of automatic cleaning equipment . . . designed to cut down manual cleaning, improve quality, and step up mill production.

For money-saving facts about Amco Cleaners, call American Moistening Company — an organization with more than 70 years' experience serving the textile field.

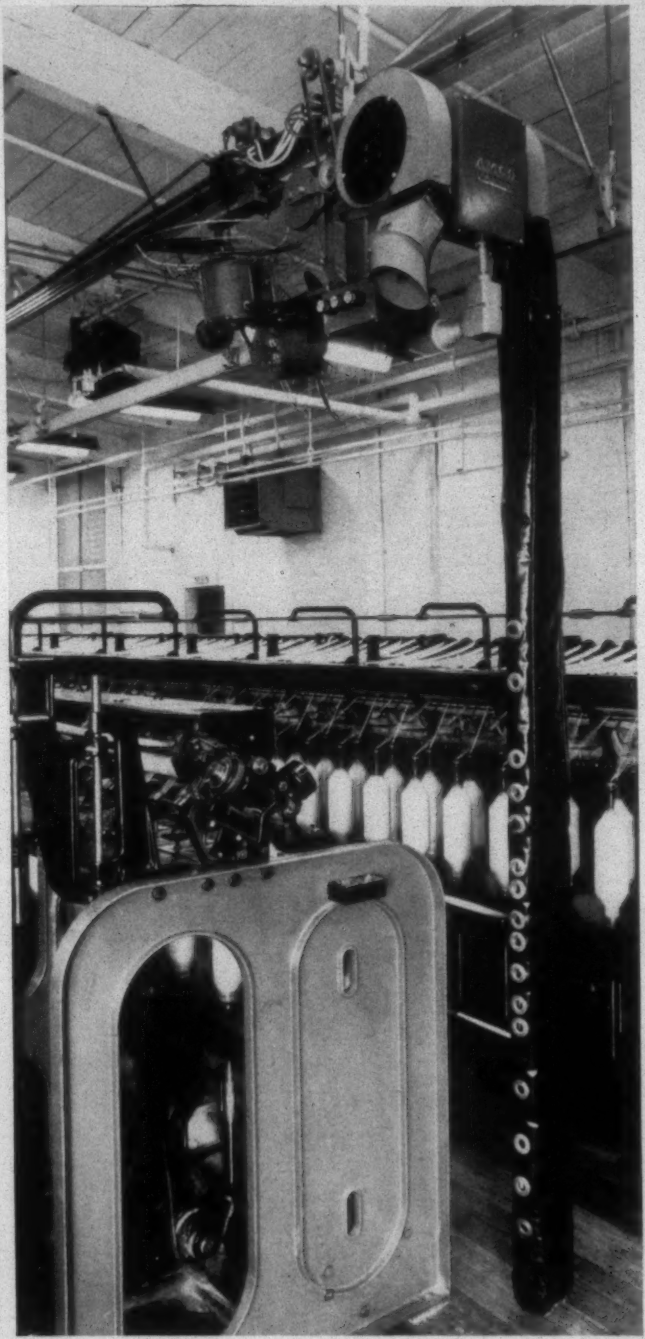


Helicone Loom Cleaners improve quality of fabrics by preventing waste accumulation on stop motions, drop wires, harnesses and reed caps.

Amco Loom Cleaners over Draper shuttleless looms. Sheeting is being woven at high relative humidity.



Amco Ceiling Cleaner provides automatic cleaning of ceiling, beams, walls and other surfaces. Excellent for card room areas.



Amco's electronically controlled Roving Frame and Ceiling Cleaner. Air delivery boot takes care of specific lint-collecting trouble spots.

AMCO

SINCE 1888

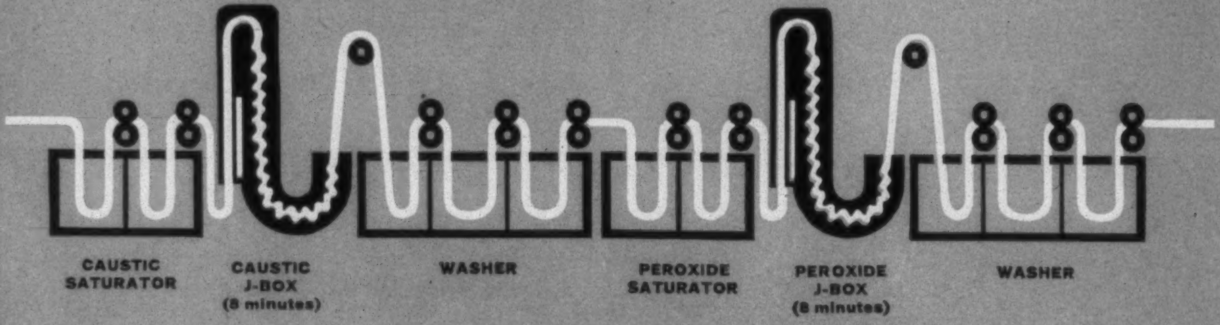
Air Conditioning Equipment — Textile Specialties

American Moistening Company, Cleveland, North Carolina
Branches: Atlanta, Ga., Providence, R. I., Toronto, Ont.

From Du Pont—originator of Solo-Matic* Bleaching

Two new cost-cutting

1. NEW RAPID BLEACH



ADVANTAGES

- **Cuts cloth storage time to as low as 8 minutes in each J-box**
- **Cuts J-box costs up to 75%**
- **Eliminates bruises, rub marks, creases**
- **Improves dyeing quality**

DESCRIPTION

Rapid Bleach is a new continuous process for medium to heavyweight fabrics that can improve bleaching quality . . . and give fabrics high absorbency for excellent dye receptivity. It's a continuous, compact, fast bleaching process that incorporates a caustic pre-treatment in the first J-Box and reduces mechanical handling operations. Rapid Bleach can be adapted to any continuous or semi-continuous open-width system . . . and is specially suitable for hard-to-handle heavyweight fabrics that are susceptible to bruising.

HOW YOU CAN PROFIT FROM DU PONT'S PROCESSES . . . SERVICES . . . PRODUCTS

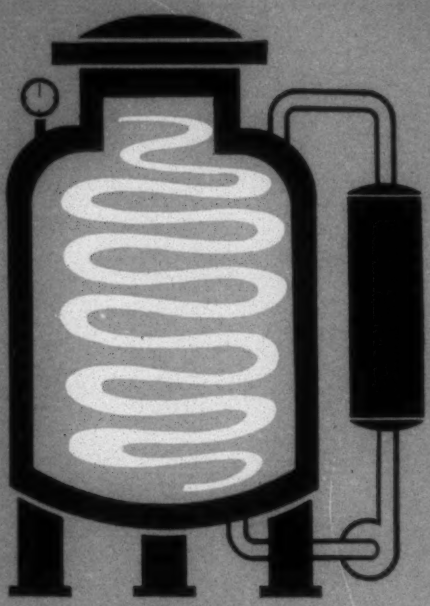
Whether or not you use any one of the Du Pont developed bleaching processes, you can count on the advice and help of an experienced Du Pont Technical Representative. He will help you with any bleaching problem that might arise or, if you wish, he can conduct a confidential survey of your entire bleachery to pinpoint where and how you can save money, improve bleaching.

Du Pont bleaching agents ensure excellent uniformity and high bleaching efficiency. All are thoroughly tested and proved by successful mill experience. All are available from convenient shipping points. Du Pont offers modern bleaching processes, technical services and quality products to help you keep *your* bleaching quality high—and your costs low. Use them and profit!

ALBONE® hydrogen peroxide **SOLOZONE®** sodium peroxide **PERDOX®** sodium

bleaching processes

2. NEW PRESSURE BLEACH



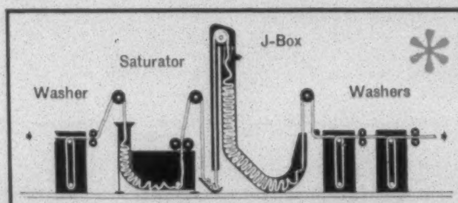
PRESSURE KIER

ADVANTAGES

- Reduces process time up to 50%
- Doubles production in the same space
- Uses present equipment
- High-quality bleaching

DESCRIPTION

This new high-speed bleaching process for kiers and package machines is a pressurized or high-temperature system that eliminates the need for caustic boil pre-treatment. The Pressure Bleaching process is used in cases where a plant's output or space does not warrant a continuous setup . . . can be easily adapted to present equipment. All types of cotton fabric, yarn and raw stock can be bleached uniformly at the lowest cost.



* **DU PONT SOLO-MATIC** is an advanced single-stage process for high-speed rope-form bleaching. It can double your production in the same floor space or maintain the same production in half the space. Solo-Matic is now helping more than 25 major mills improve bleaching quality and trim costs. With the addition of Rapid Bleach and Pressure Bleaching, Du Pont processes cover all phases of cotton bleaching. No matter what your needs, Du Pont has a modern process to help you.

For more information, write or call:
E. I. du Pont de Nemours & Co. (Inc.), Electrochemicals Department
Peroxygen Products Division, Wilmington 98, Delaware

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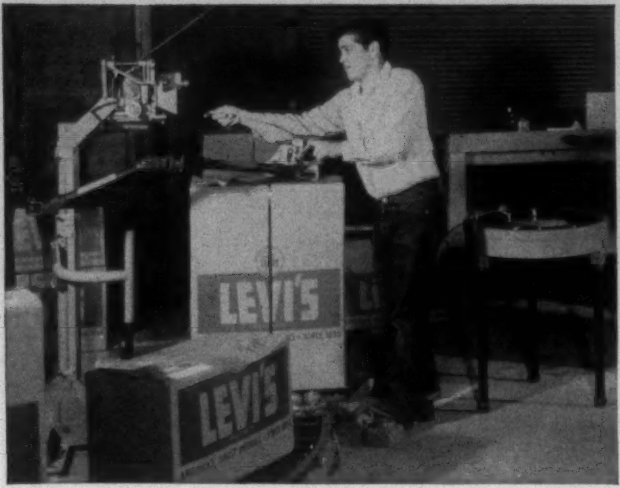
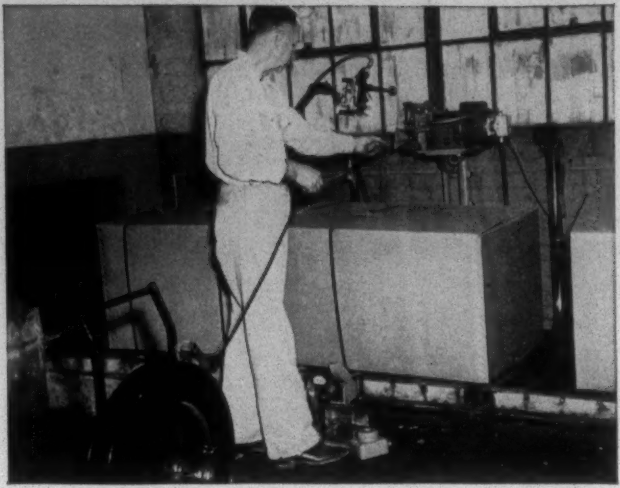
BETTER THINGS FOR BETTER LIVING
. . . THROUGH CHEMISTRY

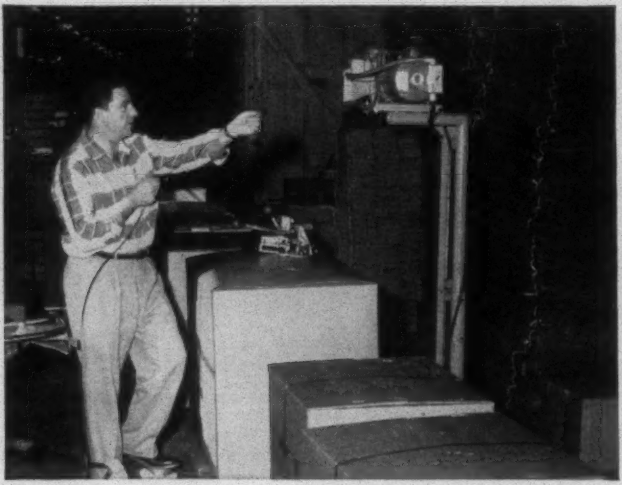
borate perhydrate **OXONE®** monopersulfate compound **SODIUM PERBORATE**



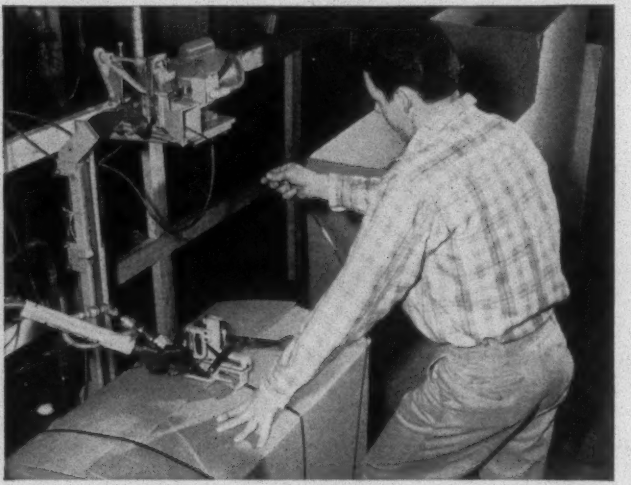
TROUSERS—One man works two conveyorized strapping stations...easily straps and weighs 440 cartons of various sizes per day, using Signode power strap feeders and Model A hand operated strapping tools. Production increased, and savings of 55% reported.



THREAD AND YARN—One man easily straps 300 cartons per day, four straps per carton, with a Signode power strap feeder and a Model AP air powered strapping tool. Operator has time for other duties. Two men were formerly assigned to carton strapping.



CHENILLES—One man straps 400 cartons per day. Cartons vary widely in size and weight. The operator has time for other duties, although two men formerly were needed. Signode power strap feeder and a Signode Model A tool are used.



FINISHED PRINT GOODS—One man straps 500 cartons a day, three straps per carton, using a Signode power strap feeder and a Model AP air powered strapping tool. Cartons vary greatly in size. Production has been more than doubled.

New low cost Signode power strap feeder a real money saver on textile packages

The power strap feeder is an independent, motorized, foot-pedal operated device for putting strap around big packages. It saves walking around...saves standing around...saves enough to pay for itself in short order. For more information, call the Signode man near you, or write to Signode for "Power Strap Feeder" folder.

SIGNODE

First in steel strapping

SIGNODE STEEL STRAPPING CO.
2665 N. Western Avenue, Chicago 47, Illinois
Offices Coast to Coast. Foreign Subsidiaries and Distributors World-Wide
In Canada: Canadian Steel Strapping Co., Ltd., Montreal • Toronto

PRODUCTION: West Point's Pacesetter Slasher is achieving drying rates of over 1600 pounds per hour (dry unsized weight) on 9-cylinder units — and with absolutely no sacrifice of quality for speed. Speeds are as high as 175 yards per minute with conventional creels (higher on some special applications), and operating speeds of 100 to 140 yards per minute are commonplace. Excellent warps come off these slashers with superior control of tension and size pick-up, whether you are slashing cotton, spun synthetics, filament synthetics, worsted and synthetic blends . . . canvas, print cloth, satin, or suiting material.

QUALITY: The Pacesetter is built to last, with an extraordinarily massive cast iron frame with smooth uncluttered sides, extra heavy-duty 2¼-inch journals with self-aligning cylinder bearings, the largest sprockets for longer life (or optional V-belt drive), patented wide-open design for superior access to the warp, convenient lift-out panels, covered steam and condensate manifolds, and other built-in quality features.

Production & Quality

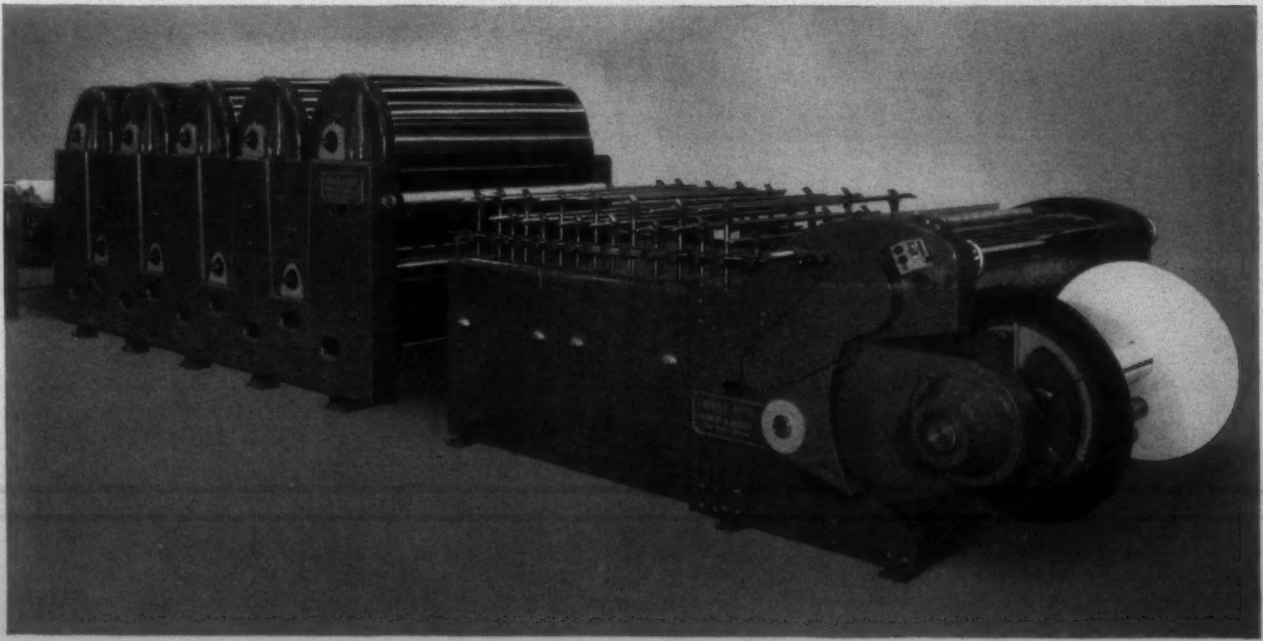
two big reasons for buying the Pacesetter Slasher

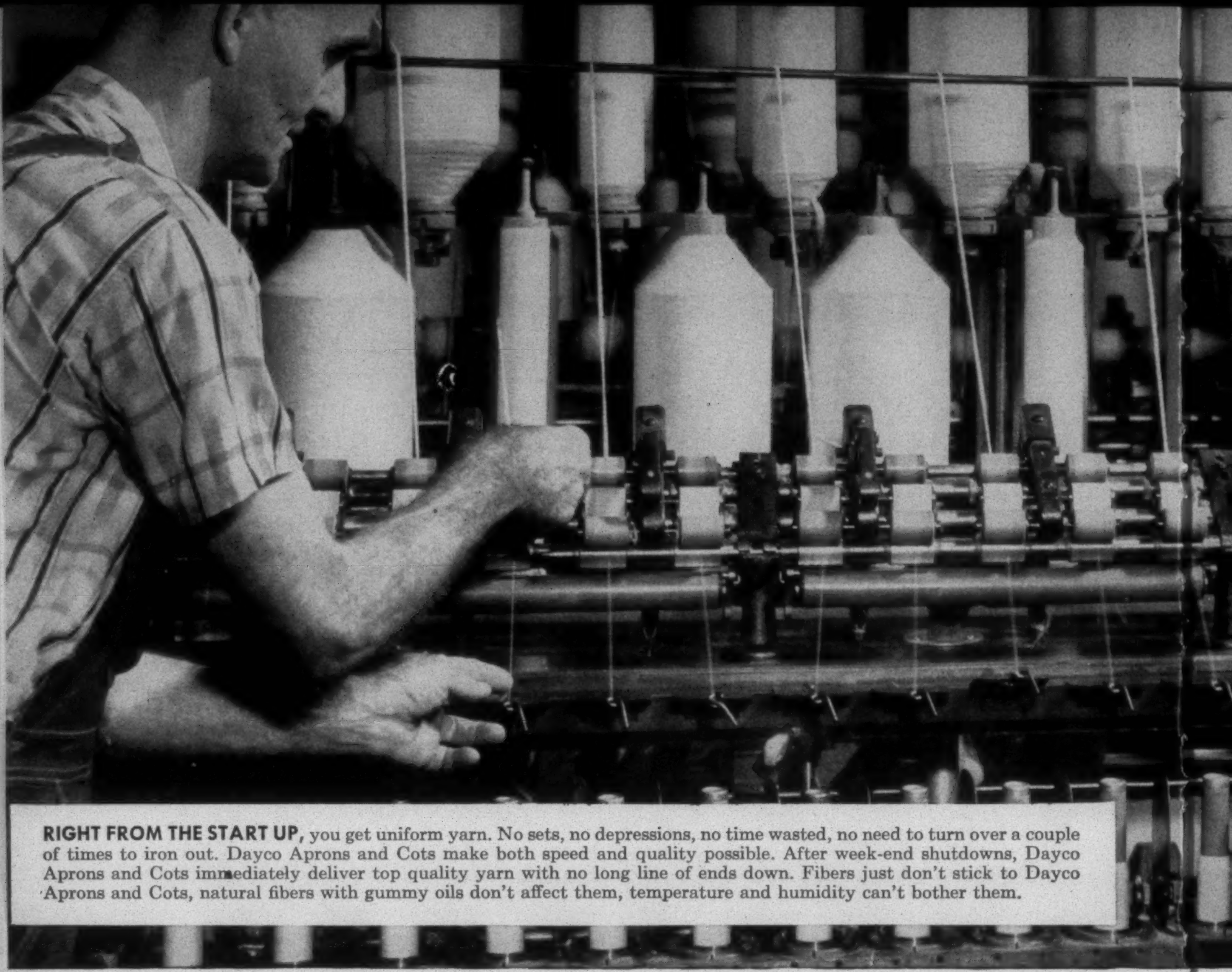
NEW SALES RECORDS: West Point's Multi-Cylinder Slasher has broken all sales records since 1955 and during the past two years more than 150 Pacesetters have been sold; more than 300 West Point Multi-Cylinder slashers sold in 5 years: An accomplishment made possible only because in installation after installation the West Point Pacesetter has proved to be the industry's leader in production — its standard of quality.

Any way you look at it — it's worth your while to get more information on West Point's Pacesetter Slasher. Ask us . . . or ask your neighbor who runs one!

West Point
Foundry & Machine Co.

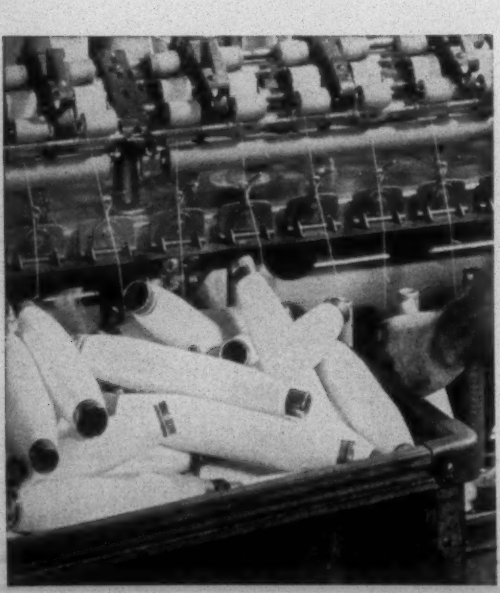
WEST POINT, GEORGIA





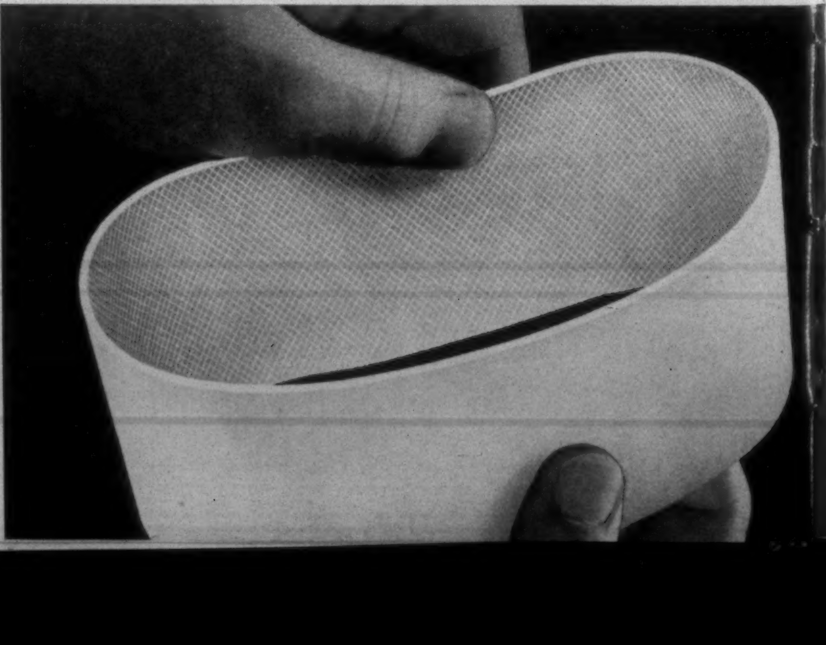
RIGHT FROM THE START UP, you get uniform yarn. No sets, no depressions, no time wasted, no need to turn over a couple of times to iron out. Dayco Aprons and Cots make both speed and quality possible. After week-end shutdowns, Dayco Aprons and Cots immediately deliver top quality yarn with no long line of ends down. Fibers just don't stick to Dayco Aprons and Cots, natural fibers with gummy oils don't affect them, temperature and humidity can't bother them.

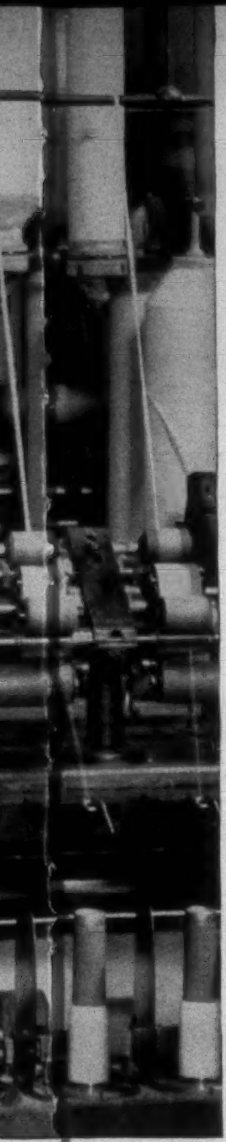
GET 12% BETTER YARN . .

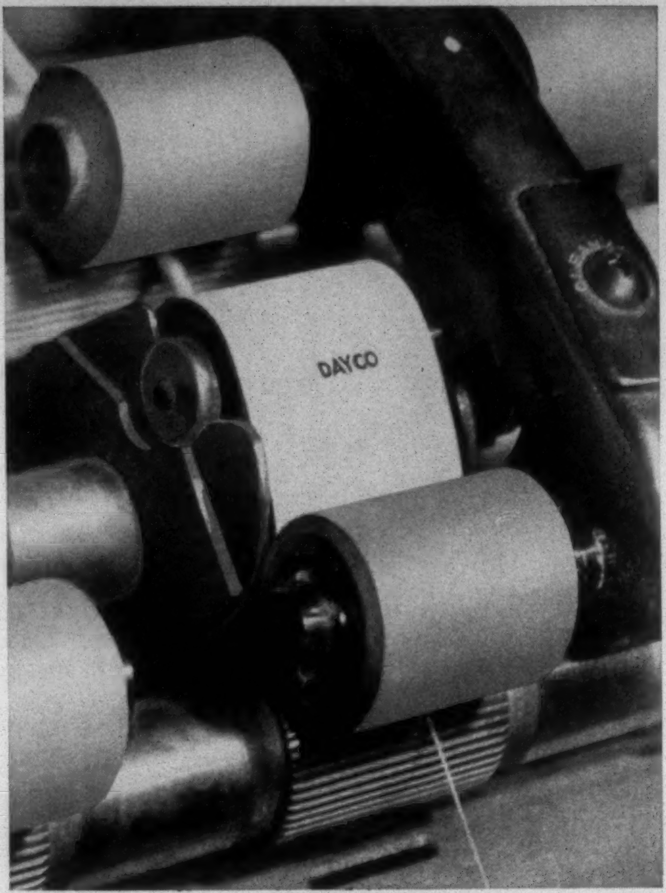


"UPS OUTPUT of strong uniform finer quality yarn" reports the overseer after a day with Dayco Aprons and Cots. Dayco's got just the right surface friction to leave the larger fibers in the yarn, not on the clearer board. You can count on Dayco Aprons and Cots when you want to count important extra yardage . . . better yarn . . . more full bobbins . . . at the end of the shift.

DAYCO'S EXCLUSIVE EMBOSSED DESIGN keeps the shaft clean, cuts your apron drag 50%, prevents tucking and eliminates waste-collecting. No sign of apron chatter, either.







DAYCO COTS STAY GOOD AS NEW year after year from buffing to buffing . . . keep all their fine-quality drafting characteristics. Dayco's long-run, top performance makes them the choice in leading mills.

. . . TROUBLE-FREE PERFORMANCE

with Dayco Aprons and Cots, the pair for profits

More yarn . . . better quality yarn . . . more consistency. These are the benefits that explain why Dayco Aprons and Cots are the choice of superintendents and overseers in leading mills everywhere. They are precision-made to exacting tolerances for modern super-drafting, and high yarn uniformity; precision-formulated for longer, trouble-free life. They outlast all others in oxygen-intensified checking tests. Dayco has proven thousands of times in the laboratory and in the mill there is no match for Dayco Aprons and Cots. Throughout their lifetime, they start better . . . stay better longer.

Ask your Dayco Representative to set up a trial installation. Phone or write Dayco Textile Products Co. (Formerly Dayton Rubber Co., Textile Division) 401 S. C. National Bank Bldg., Greenville, S. C.

Dayco
TEXTILE PRODUCTS CO.
Dayco
Divison of Dayco Corporation

OVERSEAS PLANT: THE DAYTON RUBBER CO. LTD., DUNDEE, SCOTLAND

Report of APRON CHECKING COMPARISON TEST MADE IN OZONE CHAMBER

DAYTON RUBBER researchers found Dayco Aprons superior in a comparison test. All apron brands were exposed in an intensified oxygen chamber developing O_3 (ozone).

This test, simulating actual plant conditions in the O_3 chamber converted months to minutes and showed even the leading brands developing the spiderweb checking many "months" sooner than Dayton.

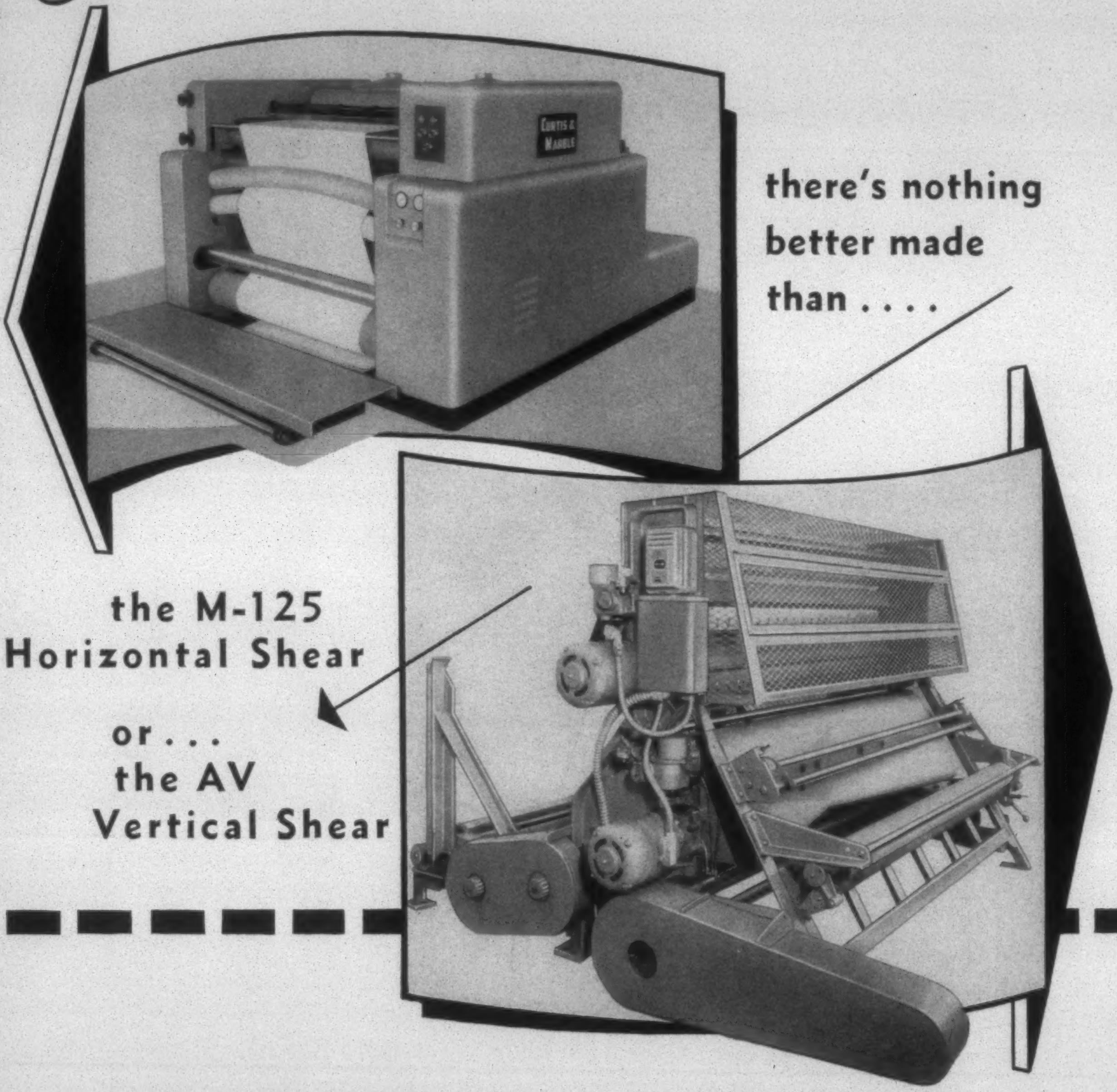
MECHANICAL VS. CHEMICAL— A NEW VIEW ON CHECKING

Air conditions in textile plants have changed greatly in recent years. We find greater turbulence of air over the cleaners, a marked increase in number of motors, plus motors of larger size, air conditioning and many other air factors. Yet Dayton laboratory research and field investigation find the checking problem should be studied in terms of mechanical, rather than chemical wear-and-tear. The new sharper angle of the apron and the machines with the new nose bars, the greater demands on machines all suggest research into synthetic compounds instead of the air conditions in the plants. Research into "rat tailing," frictional heat build-up—powerful enough to strip gears—and apron chatter promise sounder answers to apron problems than the negligible amounts of ozone found in the air.

DAYTON ATTACKS BOTH CHECKING CAUSES

Dayton researchers have as a result of this problem reformulated compounds not only to meet *chemical* conditions but also to cope with the newer *mechanical* conditions. Dayton researchers developed formulations for *lower* coefficients of frictions around the new narrow-nose tensors, yet more exacting coefficients on the apron surface for smoother more uniform yarn.

One way - or the other...



there's nothing better made than....

the M-125 Horizontal Shear

or...
the AV Vertical Shear

Yours is the choice between these two outstanding shears for sheer perfection! Let us help you modernize your Cloth Room for greater efficiency with particular emphasis on better quality. Shears such as these are the basis for your start.

Manufacturers of a complete line of Dry Finishing Machinery

CURTIS & MARBLE MACHINE CO.

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SOUTHERN SALES & SERVICE • LAURENS ROAD • GREENVILLE • SOUTH CAROLINA

ESTABLISHED 1831

Success was built into this fiber by giving it the spinning, processing, and dyeing properties you require. Demand for Creslan is growing, due to its many built-in assets. Find out how this versatile fiber can serve your needs. Write for TECHNICAL DATA BULLETIN containing the full facts. Creslan acrylic fiber is a product of American Cyanamid Company, Fibers Division, New York.

CYANAMID

Offices: 111 West 40th St., N. Y.; 3333 Wilkinson Blvd., Charlotte, N. C.; 2300 South Eastern Ave., Los Angeles, Cal.; 40 Fountain St., Providence, R. I.

DISCOVER HOW THIS NEW FIBER CAN SERVE YOU

Creslan®

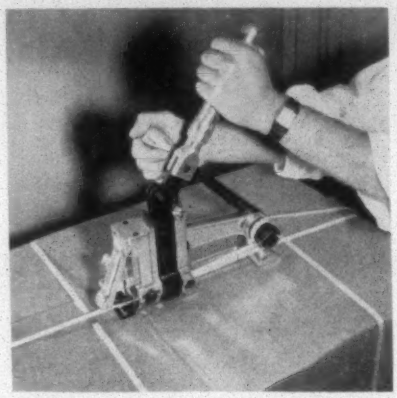
ACRYLIC FIBER

THE NEWEST OF THE ACRYLICS

For The Textile Industry's Use

– NEW MACHINERY, EQUIPMENT AND SUPPLIES –

Cord Strapping Tool



American Viscose Corp., Philadelphia, Pa., has announced the development of the first combination tool, Model AVD-1, for use with Avistrap cord strapping. Avistrap is the high-tenacity rayon cord packaging material put on the market recently by the company's industrial packaging department. For use with any strapping operation, the new tool straps and seals packages in two motions. It will be available early in 1961.

(Request Item No. L-1)

Reactive Rubine

Procinyl Rubine BS has been added to the Procinyl range of reactive disperse dyes introduced last year by Arnold, Hoffman & Co., Providence, R. I., a subsidiary of Imperial Chemical Industries Ltd.

The new dye is designed to extend usefully the range of shades obtainable and in particular to make possible the production of deep rubine shades, hitherto not feasible with Procinyl dyes.

Procinyl Rubine BS is primarily intended for application to nylon and other fibers of the polyamide class, although it is also of interest for synthetic fibers of the unmodified polyacrylonitrile type. Like its predecessors, Procinyl Rubine BS on nylon combines the advantages of a disperse-type dye with the good wet fastness that results from chemical combination of the Procinyl dye with the fiber. The method of application to polyamide fibers is the same as for the earlier Procinyl dyes, that is, exhaustion of the dye from an acid medium, followed by fixation under alkaline conditions. Dyeing is carried out in conventional equipment. No reaction with the fiber occurs in the case of unmodified polyacrylonitrile fibers, for which the normal technique for applying disperse dyes is employed.

The excellent build-up of Procinyl Rubine BS on nylon and its complete compatibility with the other members of the range, make it a suitable basis for browns, maroons, bordeaux and violet shades in addition to the deep rubines obtained in self-shades. Procinyl Rubine BS shows very good fastness to wet treatments, moderately good fastness to light and good fastness to heat treatments such as heat-setting. It is resistant to sublimation.

(Request Item No. L-2)

Multi-Purpose Lubricant

Keystone Lubricating Co., Philadelphia, Pa., announces the availability of No. 88 X Light multi-purpose lubricant in 14-oz. cartridges for use in any lever-type gun made for cartridge grease. No. 88 X Light has been available in bulk for many years.

Installed in seconds, the cartridges are said to cut maintenance time, prevent lubricant contamination, assure cleaner, easier application and eliminate costly transfer equipment. Standard packaging consists of 25 14-oz. cartridges to the carton.

Developed for general use in all industries, the lubricant is especially suitable for plain and anti-friction bearings and for use on rotating or sliding surfaces. It is water repellant, unaffected by heat or cold and is resistant to mild acids and alkalis. It withstands shock loads, seals out dirt and lengthens bearing life.

(Request Item No. L-3)

Vibrating Washer

A new full-width vibrating washer for use by dyeing and printing firms in removing solids such as sizing, clots and loose dye particles has been developed by a Dutch firm, N. V. Machinefabriek H. Brugman for export by Gebr. Stork & Co.

The machine operates on a power output of 0.25 k.w. and transmits 3,000 vibrations per minute to the fabric during laundering. As the cloth runs through the guide rollers, it passes over the vibrators—ribbed sheets of rust-proof steel 0.12″ thick — at a slight angle, thus insuring contact without the need for extra tension on the material. This facilitates removal of loose

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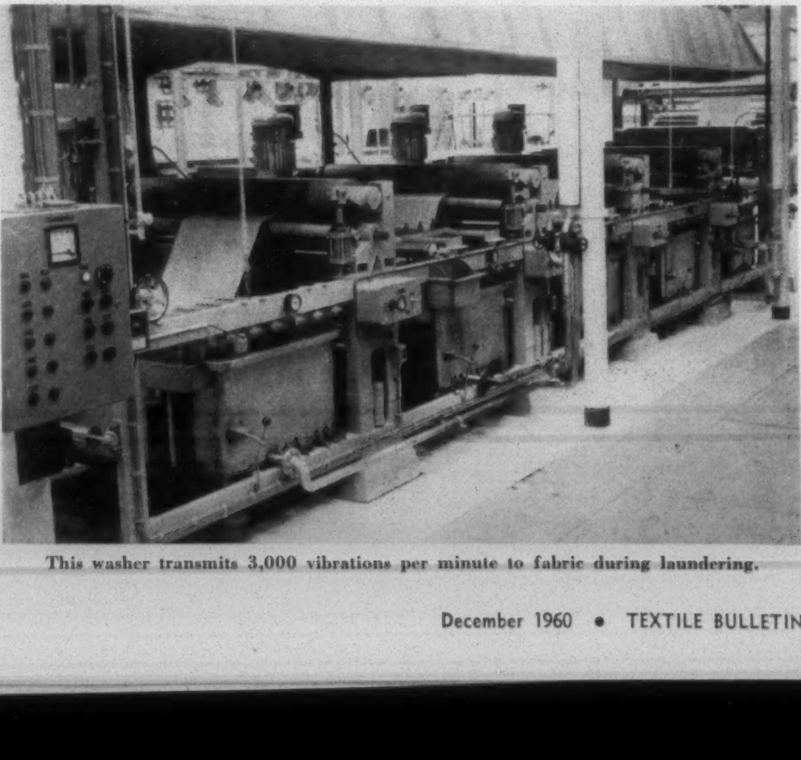
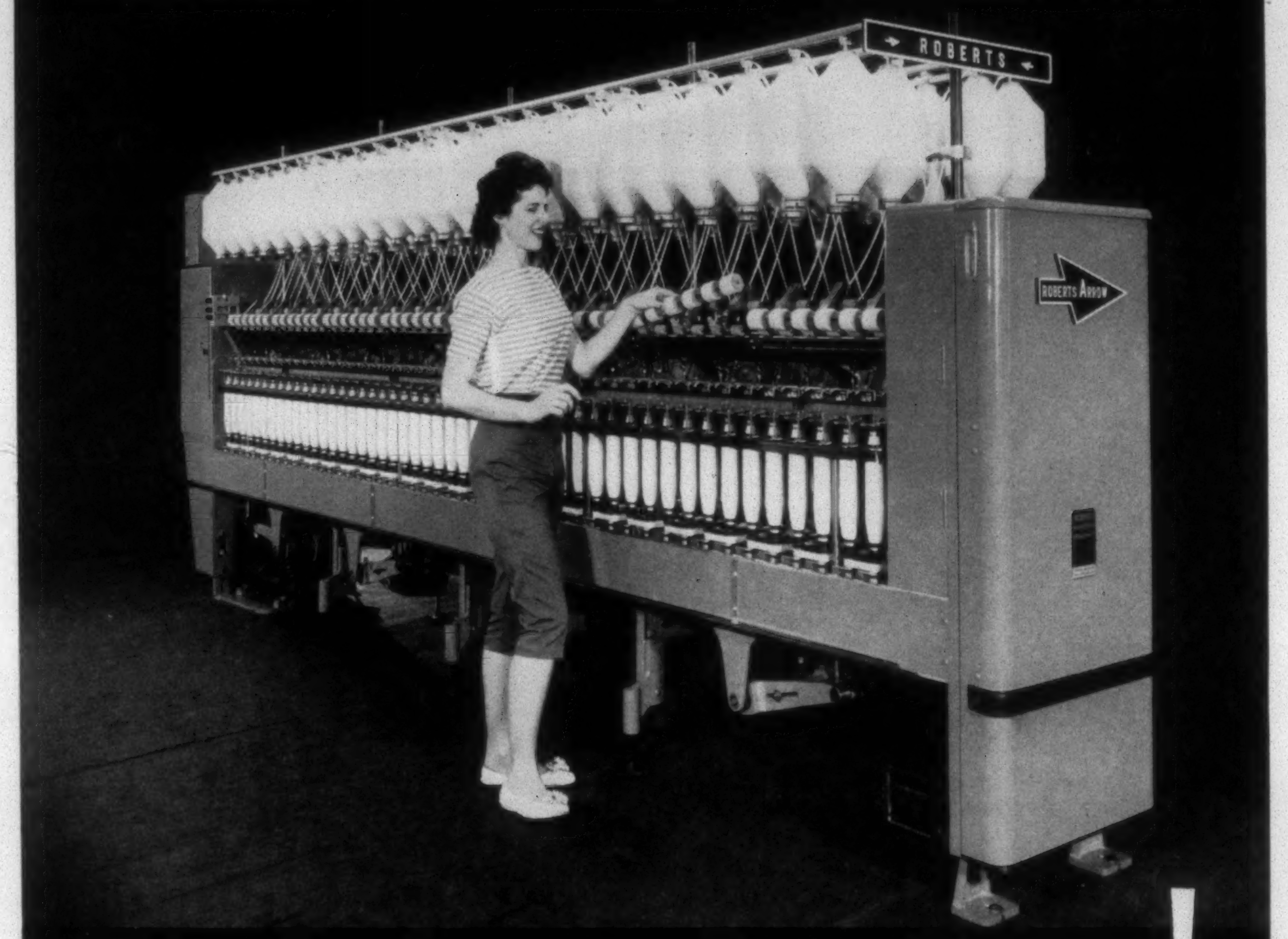


This washer transmits 3,000 vibrations per minute to fabric during laundering.

ROBERTS ARROW SPINNING



Spindle Speeds Over 13,000!

One of the most frequent questions asked today concerns high spindle speeds. The answer comes from many of the 850 Roberts Arrow Spinning Frames running in leading mills since 1956. Three examples are shown at the right.

The new and refined Arrow compares advantageously with all other all-ball-bearing frames and greatly outperforms all conventional and standard-type spinning frames. The Arrow offers the greatest dollar-for-dollar-value against any other make of frame in dependable performance, lowest initial cost, and maintenance-free operation.

Arrow Spinning is available for either the cotton or the worsted system for natural or man-made fibers or blends.

3 MILLS RUNNING ARROW FRAMES AT 12,300 to 13,200 R.P.M.

- A major sheet manufacturer runs 36's warp yarn with 2" ring at 12,300 r.p.m. spindle speed on 44 Arrow frames.
- A major manufacturer of Dacron-cotton fabrics runs 50's on 66 Arrow frames with a 1-7/8" ring at 13,200 r.p.m. spindle speed.
- A major broadcloth manufacturer using 96 Arrow frames makes 40's with a 1-13/16" ring at 12,800 r.p.m. spindle speed.

ROBERTS COMPANY
SANFORD, NORTH CAROLINA

resin clots or particles while preventing weakening of the fibers themselves.

Efficiency of the unit is said to be increased by the large amounts of fabric that are in contact with the ribbed sheets.

The vibrators are connected to a rugged frame by stainless steel motor driven rods. To prevent vibrations from being transferred to the laundering unit, the vibrator frame is suspended in heavy rubber buffers.

Further information on the new device is available from the Netherlands Trade Commission, 551 Fifth Ave., New York 17, N. Y.

(Request Item No. L-4)

Gas, Oil, Electric Heaters

A new line of heaters designed for do-it-yourself applications in the textile industry has been announced by Despatch Oven Co., Minneapolis, Minn.

For use in drying, curing and other processes, the heaters employ gas, oil or electricity and are treated from 150,000 to 3 million b.t.u. and 8 to 360 k.w.

The new line provides up to 900° F. delivered air when gas or oil is used, and 550° F. delivered air with electricity.

The heaters are available singly for custom-engineered applications, or can be had in complete packaged systems. Despatch also continues to offer specially-designed systems and components according to specification.

For complete data on the heaters, Despatch offers free bulletins 210-3 and 210-4.

(Request Item No. L-5)

Drop Box Picker

A new reversible drop box picker has been introduced by The Gates Rubber Co., Denver, Colo. Added resilience—to absorb shocks from the shuttle and picker stick—has been built into each picker to insure smooth loom operation.

Two exclusive features, according to Gates, help to reduce downtime and provide a picker that will outlast any normal reversible drop box picker. They have a self-lubricating barrel and high, wide shoulders. The self-lubricating barrel is said to increase loom production by making one lubrication of the rod last for as long as a week. Oil is applied to a felt lubricator through two access holes in the top and bottom of the picker barrel. The 1″ long lubricator is in contact with the spindle rod, providing a thin, protective film of oil to the rod with every back and forth motion of the picker.

A felt lubricator and high, wide shoulders on this plastic reversible picker make it longer-wearing, according to the Gates Rubber Co.

High-strength fabric reinforced plastic bearings, the company states, run smoothly, protecting the rod from overheating.

The special design of high, wide shoulders in the plastic picker provide a greater impact area for the shocks and blows of the picker stick which are to be absorbed by the picker. Longer service life is said to be the result of this special design and higher grade plastic material. Gates points out that both factors contribute to the longer service life of the picker and stick, reducing loom accessory replacement costs. Barrel length sizes of the reversible picker are $3\frac{1}{2}''$, with spindle rod diameters of $\frac{1}{2}''$ and $\frac{5}{8}''$.

(Request Item No. L-6)

the ROTARY UNION*

Neat Heat for Revolving Drums

The Rotary Union is trim and compact. It takes only a few minutes to install and needs no adjustments or mechanical maintenance. It permits adjustment of rolls without disconnecting or repiping. The self-adjusting and self-aligning features of the Rotary Union help maintain a perfect seal for months and years without mechanical attention of any kind. Note also the PSC Model 70T Unitrap. This compact, large capacity steam trap has trigger-action condensate discharge which assures a steady flow of hot dry steam.

You can rely on this combination for protection against over or under dried warps and cloth. Write for Bulletins 700 & 800.

*Trade Name—Patented

"WHERE *Good Connections* COUNT"®

PERFECTING SERVICE COMPANY, 332 Atando Ave., Charlotte, N.C.

Baltimore—Buffalo—Camden, N. J.—Chicago—Cleveland—Los Angeles

New York—Providence—Montreal—Toronto

Warp Sizing

Two new types of products used in warp sizing have been reported by the textile division of Texize Chemicals Inc., Greenville, S. C.

A new product used with high temperature converter sizes in mills having such converter systems is the new Texsize 963. A soft, pudgy type of product, it can be pumped and metered into heat exchangers at any given rate. The normal use-rate is 8-10% based on the dry weight of starch which passes through the converter as slurry. The product has met all requirements for high temperature converter cooking, reports show.

The second type is Texsize 960, a water dispersable dry product which can be incorporated into cold starch slurries for use in conjunction with Nemo cookers and/or high temperature starch converters. The new size offers ease of handling and is 100% active in dry form. It does not include any starch and fillers.

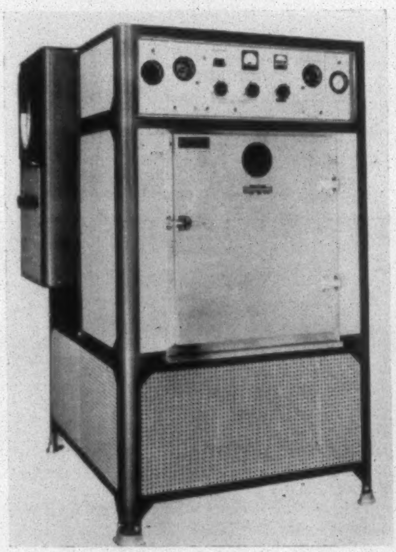
(Request Item No. L-7)

Improved Loom Bolt

A new improved low-cost loom bolt has been developed by Interlock Screw & Bolt Corp., Charlotte, N. C. The new Long-Life bolt is designed to meet loom manufacturer dimensional and physical specifications. The advantages provided by the bolt are said to include improved fatigue strength, higher thread strength and precision tolerances.

(Request Item No. L-8)

Fade-Ometers And Weather-Ometers

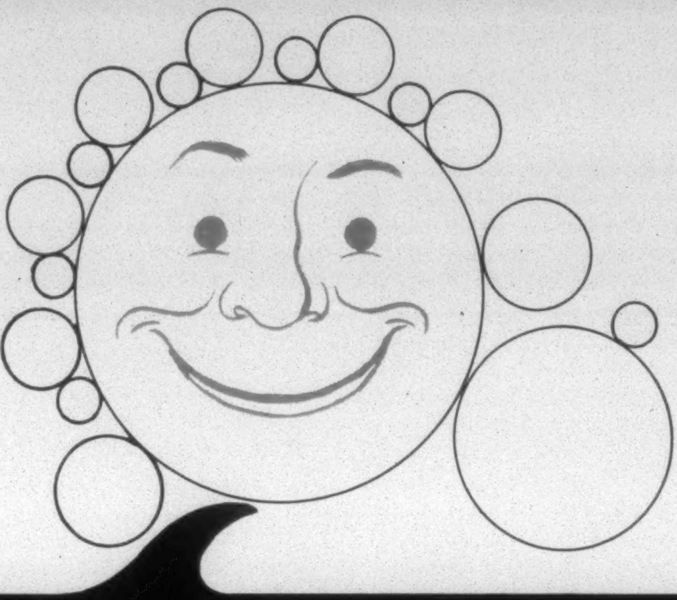


Atlas Electric Devices Co., Chicago, Ill., has developed a new line of Xenon Arc Fade-Ometers and Weather-Ometers. The Xenon lamp is said to have spectral energy distribution very close to that of natural sunlight, making it ideal for use as the source of radiation in accelerated fading and weathering machines.

The lamp is a 6,000 watt water-cooled unit designed to provide sufficient intensity to permit simultaneous exposure of a large number of samples. The specimen rack of the units has a diameter of 37¾″ and will accommodate up to 24 specimens 3x9″ in size.

Like the carbon arc type of Weather-Ometer the new Xenon arc machines provide automatic control of black panel temperature, cycles, etc., and are available with automatic control of humidity during the light-on and light-off periods of the cycle.

The lamp is also available with con-



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GUARANTEEING an immediate increase in card room output that will make all boss carders smile with satisfaction:

A NEW DEVELOPMENT IN WIRE GIVES MORE POUNDS OF PRODUCTION PER GRINDING HOUR

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Direct Representation Nationwide and in Canada

stant wattage transformers which insure a uniform radiation intensity regardless of variations in line voltage. Control equipment is also provided which permits increasing wattage of the lamp to compensate for the progressive loss of intensity as the lamp ages. These lamps have an anticipated useful life of 2,000 hours and are of the replaceable burner type so that only the burner tube and not the complete lamp is replaced.

Atlas reports that the new Xenon arc Fade-Ometers and Weather-Ometers do not replace its present line of carbon arc machines but are offered as a companion line of machines for those who desire the improved spectral distribution.

(Request Item No. L-9)

Temperature Indication

Thermocouples as long as 10,000 feet may be used for temperature indication and control with its new all-transistorized instrument, according to Metronix Inc., Chesterland, Ohio. Model 600 is a panel-mounting d.c. electronic voltmeter especially suitable for monitoring temperatures. It operates on signals that become too small to actuate an ordinary pyrometer after they encounter the resistance of extremely long thermocouples.

Chopper-stabilized, Model 600 is said to require no zero adjustment after it has been set at the factory. Designed for circuits requiring high resistance measurements, Model 600 has an input resistance of at least 100,000 ohms—or 2,000 times the resistance of an ordinary pyrometer. The signals that actuate the instrument are so small—around half of one ten-millionth of an ampere—that they do not add load to the circuit. The signals are then amplified by the instrument into useful form.

When only indication is required, the instrument uses a single-pointer panel meter. When temperature must also be controlled, Model 600 incorporates a meter-relay with contacts mounted on one or two additional pointers. Temperature may then be controlled at either high or low limits, or both.

Model 600 is available in any one of eight standard temperature ranges: 0 to 300° F., 0-500, 0-750, 0-1000, 0-1500. 0-2000, 0-2500 and 0-3000°. Standard voltage ranges are 0-10, 0-30, 0-100 and 0-300 millivolts, and 0-1 volt.

Accuracy of Model 600 is said to be plus or minus 2% of full scale deflection. It operates on 115 volts, 60 c.p.s., single-phase. The unit is priced at $300.

(Request Item No. L-10)

Expander Roll

A new principle of operation has been incorporated into a bow expander roll recently introduced by Rodney Hunt Machine Co. of Orange, Mass. Called the Aquatrol Expander, the new roll uses a thin film of water as a bearing, thus eliminating bearing maintenance and failure.

With only one moving part, this new roll has very nearly frictionless rotation. This single moving part is a rotating rubber sleeve. The unit is designed so that the sleeve floats on a film of water to give uniform, smooth, even spreading action over every increment of face width.

The conventional bow roll design utilizes a bowed shaft with multiple bearings and their housings, closely spaced, with a rubber sleeve fitted over them. These individual bearings require regular maintenance, and the failure of any one means disassembly of the entire roll.

The Aquatrol Expander, Hunt claims, is not only trouble-free in principle but replacement of the rubber sleeve can be accomplished in a matter of minutes. It also eliminates the need for considerable inventories of replacement bearing rolls.

(Request Item No. L-11)

Heavy Duty Spindle Oils

A new series of heavy duty dispersant spindle oils has been developed by Shell Oil Co., New York City. The new oils have been evaluated in a field test program during the past four years.

Vexilla D spindle oils are said to permit high production rates because of high film strength and lubricity, permitting full speed operation with heavy packages. They are designed to cut power costs by reducing frictional drag in starting and running.

With a high viscosity index, Vexilla D oils assure low starting torque and good vibration damping characteristics over a broad range of operating temperatures. By cushioning spindles against vibration they prevent hunting and logging, and thereby reduce chafing for production of smooth and uniformly twisted yarn.

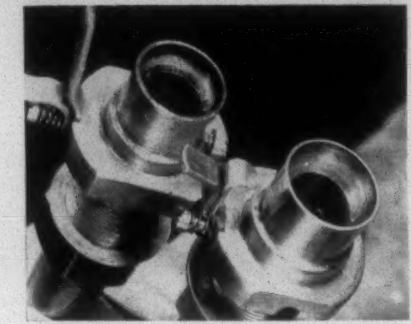
The oils are also said to prevent spoilage of yarn. They resist foaming, thereby preventing oil atomization and fog-damage to adjacent spindles. A sur-

make a note of this name

FOR:
MATERIALS
HANDLING
EQUIPMENT
tailored to the
Textile Industry

Burdette
MANUFACTURING COMPANY
P. O. BOX 8, ROEBUCK, S. C.
"Formerly THE BENNETT ROSE COMPANY"

Boxes, racks, trucks, cans, transports designed to improve efficiency and reduce operating costs for all textile procedures—or ask us to develop special equipment to meet your requirements.



Spindle bolsters after running 5,000 hours at spindle speeds of 9,000 r.p.m. under comparable conditions in the same cotton mill. Spherical insert seat in bolster at right, in which the spindle was lubricated with Vexilla D oil, shows virtually no corrosion or deposits of foreign matter.

factant or surface active agent in the oil permits removal of oil stains from yarn by emulsification.

Vexilla D spindle oils protect steel and cast iron spindle parts against rust. These oils have the dispersancy characteristics needed to hold contaminants in suspension, rather than permitting them to deposit on spindle blades or to settle in bolster cases. This assures clean and bright spindles, and prevents sticking or unbalanced spindle operation, Shell reports.

(Request Item No. L-12)

Spray Painting Process

John J. Fannon Products Co., Detroit, Mich., has announced the development of the Chemtronic paint spray process. In the new process a hydrocarbon compound known as Chemsine is heated and vaporized into a dry gas 2½ times heavier than air and is used to atomize and apply the paint.

Chemtronic is said to allow the application of coatings with much higher solids resulting in greater film build with less sags, orange peel and fewer spray passes. Much lower atomizing pressures are used which result in reduced overspray and bounce-back. Better and more uniform coverage in recessed areas is reported. Material savings are said to go as high as 50% with the new process.

Very thin materials can be atomized into much finer particles at lower pressures to give a more uniform coating. High viscosity paints can be sprayed giving up to four mils dry film thickness on vertical surfaces without sagging in a single spray pass. In most cases paint users can now apply their materials as received from paint suppliers without adding thinners.

The Chemtronic process can be used

Does
YOUR Warper
have . . .

- **DENSITY CONTROL?**
- **UNIFORM SPEED CONTROL?**

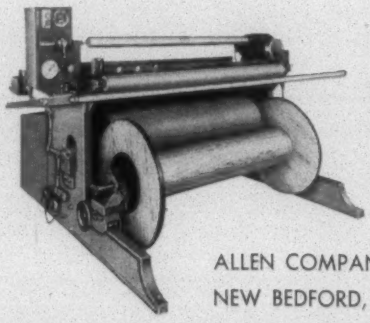
ALLEN MODEL "G", the modern warper with PATENTED HYDRAULIC CONTROL, gives you:

Uniform Density of Warp throughout entire build-up.

ALLEN PATENTED HYDRAULIC CONTROL maintains uniform pressure at all times between the beam surface and the pressor roll which drives the beam. The nip between this roll and beam is always at same distance and angle, so yarn tension is kept uniform. HARD-SHELL, SOFT-CENTER WARPS ARE POSITIVELY ELIMINATED.

Controlled Uniform Yarn Speed, variable at will.

ALLEN PATENTED HYDRAULIC CONTROL maintains uniform pressure between beam surface and driving roll, assures positively uniform yarn speed—free from the abrupt jumps in speed experienced with now obsolete methods of constantly adjusting the drive speed in an endeavor to compensate for warp build-up. In addition, ALLEN VARIABLE SPEED DRIVE enables the oprator to SELECT EXACTLY THE RIGHT SPEED FOR THE YARN BEING RUN. This means your ALLEN warper is always adjusted for MAXIMUM production consistent with QUALITY.



Don't put up with old-style warping!

Put this modern warper concept to work along with your other modern equipment. Time-proved, patented,—no other warper has these features.

ALLEN COMPANY, INC.
NEW BEDFORD, MASS., U.S.A.

Request Model G Brochure

ALLEN MODEL "G"
World's Most Advanced High Speed Warper

Ideal Flyer Reconditioning Service Assures Perfect Bobbin Build

Your worn flyers, spindles, pressers, and bolsters are *completely* rebuilt to standard specifications at a fraction of the cost of new equipment. All parts are guaranteed to work in perfect harmony and to produce bobbins of uniform size, length, and density with no top or bottom runovers. This service includes:

FLYERS Noses and barrel hubs realigned . . . barrel hubs die-swaged *full length* and reamed to standard taper . . . legs repaired and reinforced . . . worn ends rebuilt and refinished . . . flyers reblocked . . . your choice of finishes . . . and Selecto-Speed Balancing* for smooth running at *all practical* speeds.

PRESSERS blocked with proper curve and balance, or replaced.

SPINDLES AND BOLSTERS rebuilt or replaced.

ADJUSTABLE SPINDLE STEPS produce uniform bobbins regardless of wear or inaccuracies in other parts.

FOR EXTRA FAST SERVICE Ideal now carries large stocks of flyer assemblies in most popular makes and sizes and can ship promptly—allowing you a generous trade-in value on your old equipment.

Let us give you full information and prices.

*Patented

Ideal Industries, Inc.
Bessemer City, N. C.

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with practically all types of coatings, Fannon reports. The Chemsine atomizing agent does not mix with materials when sprayed, being wholly saturated in itself. It is said to be excellent for metallic paints due to the fine atomization achieved. More uniformity is possible with wrinkle and hammer finishes.

Solvent balances are said to be less sensitive to changes in temperature and humidity due to the fact that a very small part of the solvent is evaporated in the actual spraying process.

The Chemtronic equipment is said to be extremely flexible. A wide range of fluid nozzles, air caps and needles are available to cover all application requirements.

(Request Item No. L-13)

Waterproof Finish Breathes

A waterproof finish that breathes has been developed by Reeves Bros.. Inc., New York City. Called Reevair, the new finish is said to prevent water from penetrating while allowing body vapors to pass through the finished fabric. It is designed to provide 100% waterproofing while giving the wearer a comfortable garment.

Every proper washing or dry-cleaning is said to improve Reevair's ability to transmit body vapors. The finish will be particularly applicable for fabrics to be used for rainwear, uniforms, heavy weather gear, etc.

The origin of the new finish was in an electric battery process developed by the Electric Storage Battery Co., Philadelphia, Pa. As a result the ESB-Reeves Corp. was formed and holds the basic patents for the process.

(Request Item No. L-14)

High Voltage Motor Control

Its new Type 456 air-break contactor introduced recently by Allis-Chalmers Mfg. Co., Milwaukee, Wisc., has made possible a more compact design in its Space-Maker high voltage motor control. The Type 456 contactor is described as the first in the industry to use the new glass polyester Super-Pyro-Shield insulations. All insulation in contact with high voltage current-carrying parts is flame-retardant and track resistant. Through use of molded glass polyester parts and aluminum castings, considerable size and weight savings have been made. Proper proportioning of glass polyester, aluminum and steel has been essential in bringing about a 400 amp, 5-kv, 50 m.v.a. contactor in the new design. The simplified mechanical design has a vertical stroke and double-break contacts with new floating guides designed for trouble-free operation. Use of a clapper type magnet eliminates the usual problems associated with large solenoid magnets, the company reports. It puts all frictional moving parts where motion is small and driving forces high.

The new contactor has led to the making of a much smaller high-voltage control, designated the Space-Maker control. This unit is exactly one-half the size of previous models, yet with the same rating and capacity.

Some of the firsts claimed for the controller include: first starter in the 2,000 to 5,000 volt range to employ a 2-high design for space saving and the first completely drawout control on the market. The unique design is possible because of the previously mentioned Type 456 contactor.

Space-Maker control features two full-voltage, high-capacity motor controllers, one above the other, in the same space other controllers require for one unit. Each can have a full rating of up to 1,750 h.p. maximum at 2,300 volts or 3,000 h.p. at 4,000 to 5,000 volts. Each has interrupting capacity of 150 m.v.a. at 2,300 volts or 250 m.v.a. at 4,000 to 5,000 volts.

The new drawout feature consists of a wheeled contactor carriage that carries contactor, main fuses in their supports, main disconnecting fingers, control transformers and control transformer primary and secondary fuses, and a 2-pole, double-throw test circuit switch.

A simple racking mechanism enables the operator to easily and safely move the contactor carriage from the operating position to the disconnected position and return.

The Space-Maker will be available as a complete line, with full voltage and reduced voltage, reversing and non-reversing controllers for cage, synchronous, and wound rotor motors.

(Request Item No. L-15)

Freight Pry

Nutting Truck & Caster Co.'s Model 103B freight pry, primarily designed for easier, safer moving of heavy cases, crates, die blocks, machinery, etc., can now be used as a spike and nail puller.

This extra utility, which is said to be particularly useful in removing freight blocking from railroad cars and trucks, is accomplished by supplying the pry with a slotted nose. Time and labor are saved in eliminating the necessity of using crowbars or other nail pulling devices.

The straight grained 84″ long hickory handle is thickest at its vertical dimension for maximum beam strength and is encased at base with a 3″ steel channel. The unit has strong (30,000 p.s.i.) 5x2⅜″ cast semi-steel wheels. The unit weighs 45 lbs. and has a capacity of 5,000 lbs.

(Request Item No. L-16)

New Counting Unit For Label Printing

A new sealed counter mechanism is available from Markem Machine Co., Keene, N. H., for use when an accurate count is required of labels and tags made or overprinted by the Markem Model 126 machine. Without interfering with production, this 8-wheel counter automatically records label output up to 99,999,999 and then repeats. It is easily attached to any Model 126 1 or 2-color label machine, and may be used with other Markem counters which automatically stop the machine when a pre-set number of labels have been made, the firm reports.

Labels from Markem 126 machines can show all desired information—manufacturer's name and trademark, fabric content, size, style, cut and bundle numbers, washing instructions, etc.—on a single label. Inventories and label obsolescence are said to be eliminated since imprint changes can be made quickly and easily by dropping a new type insert into the pre-cut slot in the Markem Masterplate. Specialty inks are available in a wide range of colors for printing on various types of paper and fabric stock.

(Request Item No. L-17)

New Premetallized Dyes

Allied Chemical's National Aniline Division has announced the addition of two new dyes to its line of neutral dyeing premetallized dyes. They are National Lanamid Bordeaux BL and Scarlet G.

The new scarlet is said to have good application and fastness properties and is recommended for use on wool, nylon and modified acrylics. Bordeaux BL, which is said to have excellent fastness properties, is described as being especially suited for dyeing carpet and apparel

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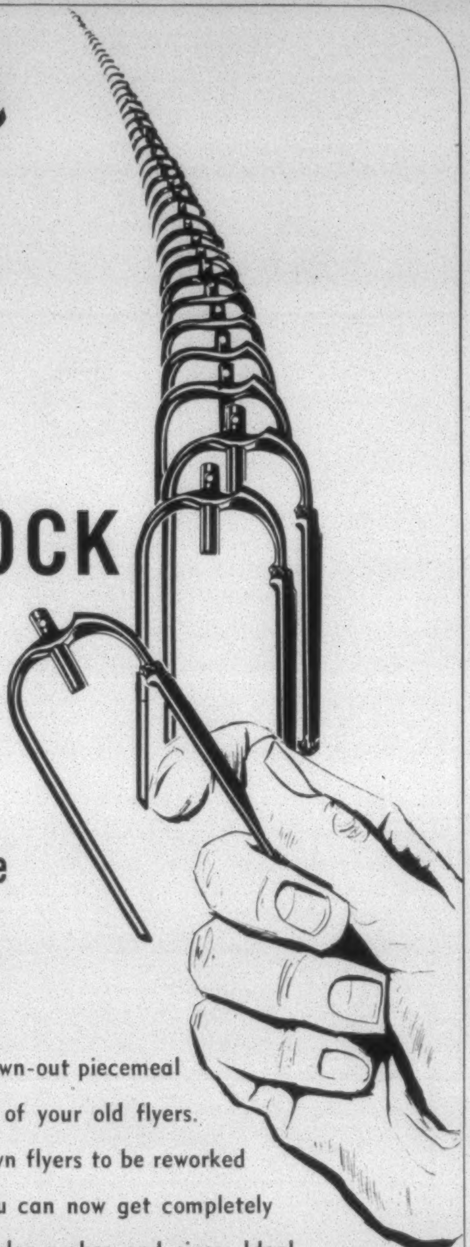

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wools, nylon and modified acrylics. It can be applied in a neutral or weak acid bath without prolonged high-temperature processing, the company reports.

(Request Item No. L-18)

Vinal Finishing

A standard of finishing formulation and methodology has been developed by Althouse Chemical Co., Reading, Pa., for vinal, the new polyvinal alcohol fiber being marketed by Air Reduction Chemical Co., a division of Air Reduction Co. The word vinal is a generic term used to describe fibers composed of at least 50% vinyl alcohol units and 85% (by weight) of a combination of alcohol and acetal units.

The polyvinyl alcohol fibers are described as readily adaptable for spinning and weaving by conventional systems in both 100% form and in blends with other synthetics as well in blends of cotton and wool. A wide range of end uses from apparel wear through domestic and industrials is now reaching the market.

Samples of vinal together with blends and combinations of other synthetic and natural fibers were submitted to Althouse. At Althouse's modern dyestuff applications laboratory, dyes were selected; techniques were modified where necessary and exact formulations and methodology were developed.

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Vinal-wool blends use Althouse premetallized Lanafast and Superlitefast direct dyes; cotton and rayon combinations employ pre-metallized Lanafast where the process must dye the vinal and reserve the cotton or rayon. Althouse Superlitefast dyes are employed in Vinal-wool combinations where both the vinal and wool are dyed with the pre-metallized dyestuff for shading purposes.

As a result of the formulations developed by Althouse, a wide range of union-shades in vinal-cellulosic blends is obtained by conventional direct-dyeing. The resultant finished product reaches the market with its inherent qualities intact. Vinals' features are said to include strength, high resistance to sunlight; high abrasion resistance; moisture absorption and extremely soft hand.

(Request Item No. L-19)

Monofilament Slub Yarn

A new monofilament slub yarn, DLP-53, has been introduced by Dawbarn Bros. Inc. of Waynesboro, Va. to the field of outdoor furniture fabrics. Up to now, it has been widely used only in automotive upholstery, in indoor upholstery and similar "sheltered" applications.

The yarn is said to produce webbing that does not have the hard, glossy, plastic look, but instead, the appearance of a fine fabric while still retaining durability, resilience and ease of maintenance. The new yarn itself is said to be comparatively inexpensive.

A larger variety of patterns and colors than has been available on the market heretofore is said to be possible with the yarn.

(Request Item No. L-20)

Release-Agent

The Distributor's Group Inc., Atlanta, Ga., has introduced a premium aerosol release-agent under the name FilMagic Super-Slick. The new agent is said to have several advantages over aerosols currently marketed.

It is designed to fill the need for a special blend of methyl silicones to resist build-up of residues from waxes, fillers and dyes, substances which are problems to the textile industry but which are not a factor in other industrial operations. A special blend of methyl silicones was indicated and this was supplied to specification by Dow-Corning. The resulting coating is heat-resistant, non-flammable, stainless and non-toxic.

The new formulation is said to contain approximately 50% more active ingredients than in ordinary aerosol offerings, with proportionate economy in use. FilMagic Super-Slick is available in 12-oz. aerosols priced at $2.25 and in 16-oz. spray cans selling for $2.75.

(Request Item No. L-21)

Pipe Thermometer

The Abrax Instrument Corp., Jamaica, N. Y., has developed a new pipe thermometer designed to simply, easily and instantly clip to steam, water, refrigeration, gas and other pipes by means of twin spiral spring clips supplied with each instrument. The instruments can be attached or removed from the pipes in seconds and require no alteration of the pipes. This factor eliminates any need for branching or drilling. The thermometers are precalibrated to counteract the possibility of error through heat losses of radiation or convection.

They can be used for all pipes up to 3½" in diameter. The dials are 2½" in diameter, silvered, with black figures and polished chrome casings. The thermometers are graduated in 2° divisions.

The thermometers come in two temperature ranges. Model No. APFT 460 for the range from plus 32° to 320° F. and Model No. APFT 461 for the colder ranges of minus 14° to plus 134° F. The price of either instrument is $12.95.

(Request Item No. L-22)

Fork Truck

A new 2,000 lb. capacity, gas-powered fork truck equipped with pneumatic tires has been introduced by the industrial truck division of Clark Equipment Co., Battle Creek, Mich. Designated the CY 20, the truck is equipped with pneumatic 6.50 by 10 drive and steer tires on a 54" wheelbase. Dual drive tires and wide profile tires (23 by 8.00) for extra flotation are available as optional equipment.

The CY 20 is powered by a 49 h.p. engine which has a displacement of 162 cu. in., and develops 123 lb.-ft. torque. The unit will start and stop on a 37.5% grade with a 2,000-lb. load.

Two transmissions are available for

the machine. Hydratork drive, Clark's power-shifted automatic transmission, is standard equipment on the CY 20. A companion model, the CFY 20, has a standard transmission with an 11" diameter, double-faced, single disc, dry plate clutch that can be changed quickly by removing floor plate and front load panel. A split housing encloses the clutch.

According to Clark, quick-change design eliminates need to uncouple hydraulic hoses, disassemble the frame or pull the transmission when making a clutch change.

On both models, lift speed loaded is 74 f.p.m. and empty 91 f.p.m. Upright channels are rolled from S.A.E. 1045 fine grain steel. Nested inner upright travels on life-time lubricated rollers which provide continuous roller contact while upright is telescoped.

Lift and tilt of the upright is controlled from one lever mounted on right side of steering column, which enables operator to lift and tilt simultaneously.

(Request Item No. L-23)

Lift Trucks

Several new lift truck units have been introduced by Hyster Co., Portland, Ore. The company has announced the development of its new SpaceSaver 20 lift truck which marks its entry in the field of cushion-tire, 2,000-lb. lift trucks.

The unit is said to feature narrow width, easy handling and short turning radius making it especially suitable for congested warehouse operations. The unit is designed to provide operator comfort, resulting in less driver fatigue and more production per shift.

The unit is available with power-shift transmission and Monotrol control system or with manually-operated, 2-speed transmission. The Monotrol control system combines forward-reverse and throttle control in one right-foot pedal. Dashboard "drive" and "park" pushbuttons and an automatic parking brake are other Monotrol features.

Other features designed to provide minimum service operation are a full-flow hydraulic oil filter and dry-type engine air filter. All hydraulic oil is pumped through the easily accessible filter on the way back to the tank. The dry-type engine air filter is located in a special housing and can be easily removed. The filter draws air directly from outside the truck.

The company's new Challenger series of lift trucks are now available in the 3,000 to 5,000 lb. capacity range. The units are available with the Monotrol control system and the Monomast upright, a telescoping box section unit which affords an unobstructed view of the forks and load.

(Request Item No. L-24)

Solution Dyed Polyester

Solution dyed colors in polyester fibers are being introduced commercially by Eastman Chemical Products Inc., New York City. Following closely the inception of solution dyed Black Kodel in men's wear blends on the woolen and worsted systems, the introduction of Kodel Navy and Kodel Brown is designed to increase styling possibilities for designers in a wide range of fabrics.

Solution dyed Kodel is said to permit unique color effects heretofore impractical in polyester fibers and to offer built-in uniformity of color and fastness that cannot be achieved by any other method of dyeing polyesters. The deep penetration of solution dyed Ko-

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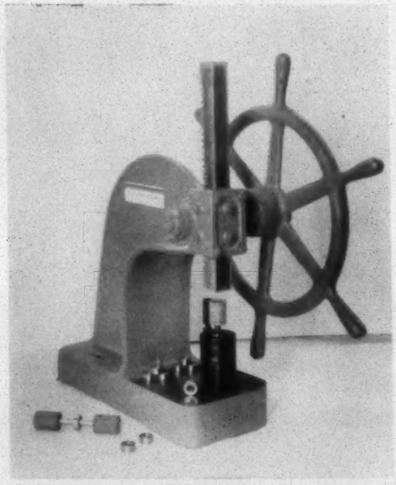
del colors also makes them impervious to all finishing processes such as the use of bleaching agents or other chemical solvents that normally affect colors, Eastman reports.

The new solution dyed Kodel colors will be produced in 3-denier staple and tow, at $1.86 a pound for Brown and $1.96 for Navy. Solution dyed Black Kodel is available in 2.25 and 3-denier staple and tow at $1.76 a pound.

(Request Item No. L-25)

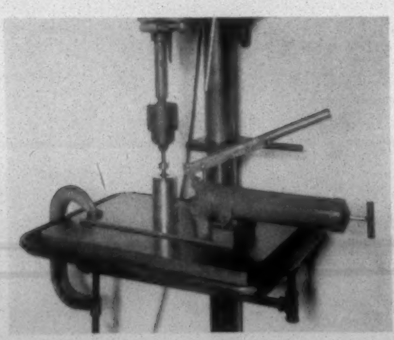
Ball Bearing Service Kit



Arbor press and fixture for removing and replacing bearings as necessary. Bearings do not need removal for regreasing.

The Dixon Corp., Charlotte, N. C., and Bristol, R. I., is making available a special service kit for regreasing and/or replacing the bearings on existing Dixon ball bearing top rolls.

An important part of the kit is a new regreasing pump to regrease the bearings without removal from the roll arbor and without removing any part of the bearing. With this simple unique method of regreasing, up to 800 rolls can be done in 8 hours, Dixon reports.



Simple and unique regreasing pump works on a drill press. An operator can grease 800 rolls in 8 hours.

The service kit also includes a hand arbor press and special fixtures for removal and replacement of bearings as necessary, along with a "bearing bank" of 300 new top roll bearings. The service kit is available to all mills using the center bearing type of top roll. Until the development of the new regreasing pump, it was not possible to simply and quickly regrease top roll bearings, so maintenance was easily neglected, Dixon points out. Now, with this easy maintenance tool, Dixon top rolls and others of a similar design, can have an extended life many times previous expectations.

Dixon says that a new type improved grease recently developed should be used when regreasing. This new grease is designed to lengthen bearing life considerably.

(Request Item No. L-26)

Experimental Teflon Monofilament Yarn

The availability of experimental quantities of a new Teflon FEP-fluorocarbon monofilament fiber has been announced by the Du Pont Co.'s textile fibers department. Previously, only multi-filament yarns of Teflon TFE-fluorocarbon fiber have been on the market.

The monofilament fiber may be purchased for product evaluation, in experimental amounts, at a price of $35 per pound. It is available in two sizes—250 denier, which is equivalent to a cross-section diameter of five mils; and 1200 denier, which is equivalent to a cross-section diameter of 11 mils.

Also available is 100 denier multi-filament yarn of Teflon TFE fiber, the lightest weight yarn yet produced of this material. For experimental use it is priced at $75 per pound.

Another yarn, previously sold only in experimental quantities, now is being produced commercially. This is 200 denier multi-filament TFE fiber, priced at $27 per pound. Four hundred and 1200 denier multi-filament yarn and staple fiber of Teflon TFE-fluorocarbon currently sell for $14 per pound.

Teflon has outstanding chemical resistance and has no known solvent. The fiber retains its strength even after prolonged exposure at operating temperatures ranging from —100° F. to +100° F. The fiber is completely mildew resistant and is not degraded even after years of outdoor exposure to ultra-violet rays.

Fabrics made from Teflon FEP-flurocarbon monofilament fiber can be heat sealed to prevent edge raveling—a major problem with conventional fabrics woven from Teflon TFE multi-filament yarns.

(Request Item No. L-27)

Two-Wheel Hand Trucks

A new line of two-wheel industrial hand trucks is available from Harper Trucks Inc., Wichita, Kan. Conventional models for all types of box, carton and package handling are made in capacities of 400 to 1,000 lbs. They are available with solid rubber tired wheels as well as pneumatic tired wheels. Wheel sizes are from 5 to 10" diameter. Wheels are equipped with oilite, ball or roller bearings. Series 1 trucks include three sizes that have expanded metal backs to keep small packages from falling through. All truck frames are of tubular welded steel design for light weight and strength.

Special application trucks include the Drum 'N Barrel unit which comes in two sizes with drum capacities up to 1,200 lbs. A line of heavy duty steel tool boxes in four sizes complements the line. These are for plants having a need for a heavy tool box to install in the shop or on outside equipment. It may also be used as a portable tool box or welded or bolted in place on equipment.

(Request Item No. L-28)

Textile Surfactants

Antara Chemicals Division of General Aniline & Film Corp., New York City, has developed a new series of surface active agents. The initial application areas for the first entrants in this new product line include cotton boil off and bleaching, wool scouring, antistatic-emulsifier-lubricant, heavy-duty liquid detergent cleaning compound, emulsion polymerization, pesticide emulsifier, metal cleaning and dry cleaning fields.

The new trade name Gafac has been adopted and registered in order to set these products apart from the company's standard line of surfactants.

In the textile field, the Gafac surfactants are of value in fabric preparation and finishing application. The compound's exceptional solubility, chemical stability, antistatic and lubricating properties, and oil and water emulsification characteristics will be of particular value to the textile processors.

The agents are described as excellent emulsifiers and detergents, which may be prepared with varying degrees of solubility in aromatic, aliphatic and chlorinated solvents, water and strong aqueous solutions of alkaline builders such as sodium hydroxide, polyphosphates and silicates. Gafac surfactants are supplied as the 100% free acid or as a sodium salt.

Four Gafac surfactants, GB-520, PE-510, LO-529, RE-610, are now commercially available and two others, RM-510 and RM-710 are being readied for commercialization.

Gafac GB-520, available as a 95% active sodium salt, was developed particularly as an emulsifier-antistatic lubricant, useful in the processing of Nylon 6 and other synthetic fibers.

Both Gafac RE-610 and PE-510 are effective surfactants for use in Kier boiling and continuous caustic boil off of cotton piece goods. Here, advantage is taken of their solubility in caustic solutions and their emulsification, wetting and detergency characteristics. Gafac RE-610 is also said to be finding use as the detergent for scouring and bleaching of synthetic fabrics.

Gafac LO-529 is the 88% active sodium salt of Gafac PE-510 and is employed for compounding of detergent-emulsifiers.

(Request Item No. L-29)

95% Efficiency Cited For The New Uster Spectromatic

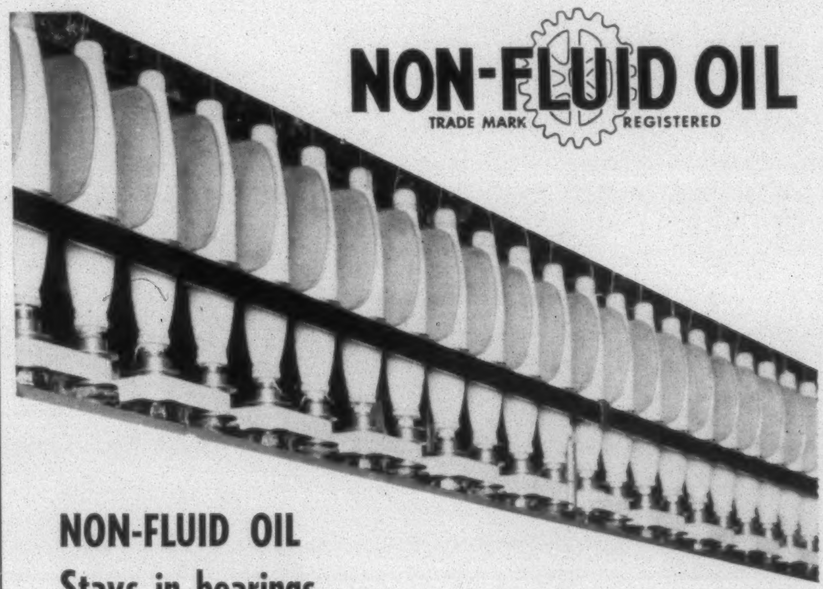
One of the many new developments shown at the Southern Textile Exposition in Greenville, S. C., in October was Uster Corp's new Spectromatic slub catcher.

Shown for the first time in operation, the transistorized units are designed for use as practical production control devices. A new approach to slub control allows the Spectromatic to be set from a central control position, automatically compensating for size variations in yarn and assuring the mill of the elimination of defects which should be removed—at the same time, after electronic discrimination, allowing certain defects to pass when the knot would be more serious than the defect.

The Spectromatic removes up to 95% of slubs in winding, Uster points out, whereas at peak efficiency, existing slub-catchers remove only about 50% to 60% of the slubs. The unit can accomplish this with a minimum loss of winding efficiency because of the special design at the mounting unit. The design of the device enables winder tenders to re-tie and put up the end with movements similar to those used in re-tying an end on a mechanical slub-catcher.

The Spectromatic operates on low voltage and is not affected by power fluctuations. No warm-up period is required since units are stable and ready for operation when turned on. The units are unaffected by vibration and can be mounted directly on the existing winder arm.

The actual Spectromatic unit is made in two types—one for long staple fibers such as wool, worsted, and synthetic



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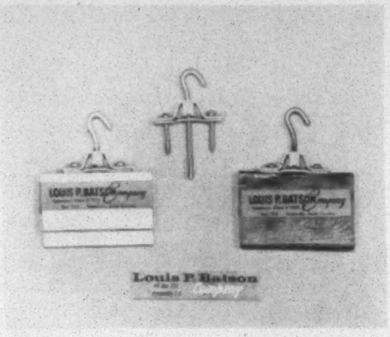
blends; and one principally for cotton fibers. Since defects differ in long and short staple yarns, two different models are necessary.

(Request Item No. L-30)

Harness Frame Hook



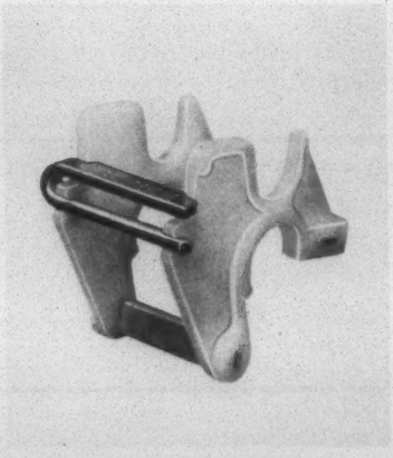
A new harness frame adjustable hook for use with shorter connectors and designed to prevent stripping out of hooks in harness frames is now being marketed by Louis P. Batson Co., Greenville, S. C.

A significant feature is its spring clip attachment, which maintains constant eye rigidity. The hooks have a 1¼″ tolerance adjustment and are adaptable to wooden and aluminum frames and also for ½″ heavy duty wood frames.

Also available from the Batson Co. are hardened drill jigs for correct installation of the new adjustable hooks to existing looms.

(Request Item No. L-31)

Support Cradle



Progressive Engineering Inc., Rockland, Mass., has been assigned a U. S. patent covering a new cradle serving to support and to position the middle top roll and the aprons associated with the middle top and bottom rolls of spinning and roving frames.

The cradle is formed of nylon material which is said to require no lubrication and to not wear itself or cause wear on the steel shaft on which it is mounted. Because no wear takes place, the accurately determined position of the cradle, when mounted in position, is not changed. The lower recess of the cradle being formed as an arc of more than 180° permits a snap lock action on the bottom roll.

Another feature of the cradle is an arrangement to vary the gap between aprons passing about the middle rolls by providing means to mount U-shaped clips of different sizes. The Progressive anti-friction cradle is manufactured under the trade name of Ny-Pre-Lon.

(Request Item No. L-32)

Weft Straightener

An electronically controlled weft straightener has been introduced by American Cloth-Strait Co., Charlotte, N. C. The straightener determines weft irregularities by means of four electronic counters and signals the indicated corrections to conventional canted and rotating arched rolls, which perform the straightening operation.

The unit operates with two quartz lamp scanners on each side of the cloth. Each lamp casts a line of light 2¼″ long at a 7° angle up to the fabric. A rotating disc with a slotted periphery breaks these light lines into dots as the cloth passes, and each thread interrupts the dot and causes a count to be made on a photocell. The impulses are amplified and measured by electronic counters whose outputs are in micro amperes.

Accurate and stable micro amp signals are fed into two channel magnetic amplifiers, whose output thus is determined by the relationship of the four separate counters.

When the weft is not perpendicular to the warp, an unbalance in the counts on each side occurs, and the correction signal is based on the relationship of these counts.

The DC servo motors which make the correction in the mechanical assemblies are driven by fast acting, back-to-back Thyraton power amplifiers, with the magnetic amplifier giving the signals to the servo power amplifiers.

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An automatic stop motion is featured on the operating controls so that the unit returns to manual control in the event of any electronic failure or should other test conditions require.

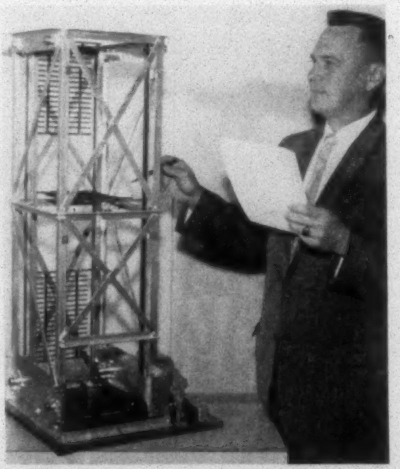
Testing is usually done with continuous belts of 40 to 50 yards of fabric, but the unit can be operated with a continuous movement of cloth unlimited in length.

Weft corrections, as indicated by the electronic system, are made by means of two conventional canting rolls to eliminate skew, and two pivoting or rotating rolls to eliminate bow.

The manufacturer, American Cloth-Strait Co., is an affiliate of Control Products & Engineering Co., which also operates Control Electronic Industries, producer of the electronic equipment in the device.

(Request Item No. L-33)

New Lift Conveyor



A new type of vertical conveyor, the Escaveyor, has been introduced by Standard Conveyor Co., St. Paul, Minn. The new unit is a self-loading continuous vertical conveyor which moves 8 to 10 loads per minute with the continuity of a belt conveyor.

The device is operated by four endless chains, running over a complicated set of rollers and carrying cross slats that pull the load aboard as they form a level platform that carries the load to the top.

It is described as ideal for high volume vertical movement of commodities in multi-story textile mills. It is particularly practical, the manufacturer reports, where freight elevators are too slow and lack of space prohibits installation of inclined belt conveyors.

(Request Item No. L-34)

For the Mill Bookshelf

Stone Age Textiles

A free cartoon depicting textile manufacturing during the Stone Age is available from Stowe-Woodward Inc., Newton Upper Falls, Mass. The cartoon pokes fun at an imaginary textile manufacturing process. Cave men and women go through a series of absurd and comical steps which lead to utter confusion. The cartoon is 13 x 11" and is printed on a heavy duty card stock.

(Request Item No. L-35)

Industrial Truck Selection

"Proper Truck Selection" is the subject of a new 8-page, 2-color brochure published by the Automatic Transportation Co. of Chicago. This is the 5th of a series of technical brochures designed to give the materials handling engineers information which they can retain as a ready reference to their everyday handling problems.

The brochure describes how misapplied industrial trucks can damage a mill's cost position. Case histories show how the wrong truck installed in different situations cause unproductive output and increased costs. Correct solution, plus 5 pages of application photographs illustrate the importance of truck selection. Seven tips for choosing the right truck to fit each application are also listed.

(Request Item No. L-36)

Yarn Inspector

The fully transistorized Lindly Series 1,000 Ultra Yarn Inspector is the subject of a new, 4-page brochure recently issued by the electronic sales division of Foster Machine Co., Westfield, Mass.

According to Foster, exclusive sales agent for Lindly electronic controls, the new Series 1,000 inspector is a completely redesigned successor to the Lindly Model B and Series 600 Multicontrol units which have been in use for more than five years.

The inspector is designed for use primarily by synthetic yarn producers and processors. It consists of a detecting head, over which the yarn is run, and a compact electronic control unit which can be mounted remotely if desired. According to Foster, this combination of both optical and electronic design will provide an automatic control of yarn and warp quality and a reduction of warping costs.

Included in the brochure are illustrations and descriptions of three available control units used with the yarn inspector. The Model 1050 single level control unit is specifically designed for applications where it is desired to detect and count the yarn defects and to stop the warper for their removal. The Model 1060 dual level control unit is recommended for detecting yarn defects on two different sensitivity levels. Model 1070 is designed for application where length of defects is an important factor.

Also incorporated in the brochure is a recommended schematic for the installation of a Lindly yarn inspector on a warping machine. In addition, details and illustrations of other Lindly electronic units are prominentaly displayed.

(Request Item No. L-37)

Decorative Metallic Chips

Three new patterns of Metalflake, precision cut metallic chips for decorative use, are included in a folder issued by The Dobeckmun Co., Cleveland, Ohio, a division of The Dow Chemical Co. This brings to nine the number of patterns shown in a sample card contained in the folder.

In addition to the new patterns offered in diamonds, comets and microflakes shapes, Metalflake also includes staple, squares, rectangles, hexagons, random cuts and stars that have already seen wide industrial acceptance. Actual sizes, shapes and colors are shown on the sample card.

These sparkling metallic chips are adaptable to a wide variety of applications including upholstery and apparel products.

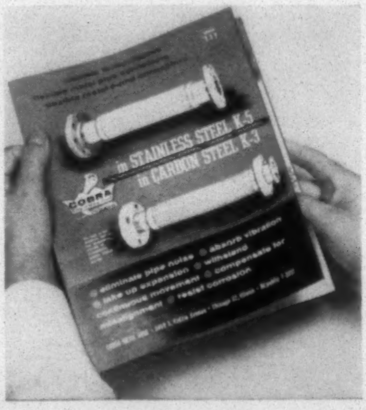
(Request Item No. L-38)

Automatic Doffer

Willcox & Gibbs Sewing Machine Co., New York City, has published a new question and answer brochure designed to give full information about its new automatic doffer. The study is based on conversations with textile engineers who have studied the prototype model of the unit. First deliveries are expected to be made in the Spring of 1961. The doffer is available only on a lease basis at $6,000 a year per unit.

(Request Item No. L-39)

Flexible Metal Hose



Cobra Metal Hose, Chicago, Ill., has published a new Catalog No. 539 illustrating and describing an extensive selection of flexible metal connectors in carbon steel and stainless steel. Complete specifications including pressures, working temperatures and installation methods are also included. A comparative analysis of the advantages and limitations of both types of metals for specific applications gives both the engineer and the maintenance man an excellent guide for selecting the right connector for the job. Sixteen standard models are shown—complete assemblies with other end fittings, etc., are available.

(Request Item No. L-40)

Epolene Emulsification

A pressure technique for the rapid emulsification of Epolene types E, LVE and HDE, low-molecular-weight polyethylene resins, is described in a new technical data report available from Eastman Chemical Products Inc., New York City, a subsidiary of Eastman Kodak Co.

The report outlines equipment requirements and the procedure used to prepare non-ionic emulsions in a closed vessel under low pressure steam (15 p.s.i.g.). Advantages over the standard wax-to-water method are said to include: all ingredients are charged at one time, separate melt tanks are not required and production time may be decreased as much as 75%.

The use of polyethylene emulsion in the textile field is also briefly discussed, followed by step-by-step instructions for the preparation of non-ionic, anionic and cationic emulsions by standard methods.

(Request Item No. L-41)

Walkie Truck

A new, 6-page circular describing its high-stacking, 2,000-lb. capacity walkie with a built-in charger is available from Lewis-Shepard Products Inc., Watertown, Mass., manufacturer of electric-powered materials handling equipment and related products.

A self-contained powered time saver and auxiliary workhorse for transporting, stacking, loading and unloading in plants, warehouses and stores, the Tier-Master is a clean compact and fume-free all-electric high stacking walkie.

Twin industrial type batteries made especially for the unit provide sufficient power to operate 8 hours at continuous light work cycle or intermittently 8 hours a day at a heavier work cycle. A special built-in charger works on any 115 volt a.c. outlet to recharge overnight.

(Request Item No. L-42)

Roll Testing

Stowe-Woodward Inc., Newton, Mass., has made available a new product bulletin on Sto-Foil, a new and simplified method for testing both the nips and crowns of rubber covered rolls. The bulletin describes the procedure for taking nip and crown impressions with the firm's patented aluminum foil.

(Request Item No. L-43)

Controlling Electric Furnace Fume

"In A Fog About Electric Furnace Fume?" is the title of a new bulletin offered by Wheelabrator Corp., Mishawaka, Ind. The bulletin discusses three accepted hooding methods for controlling fume from electric are melting furnaces: the furnace roof type, overhead canopy hooding and direct shell evacuation.

Described in detail in the 8-page bulletin are the operating principles and advantages of each system to serve as a guide in evaluating each hooding method for a particular furnace fume control application. Illustrations of typical installations and diagrams are included to show the features and uses.

(Request Item No. L-44)

Metallic And Ceramic Coatings

A new brochure describing its Plasma Bond Spraying Service for metallic and ceramic coatings is being made available by Thermal Dynamics Corp., Lebanon, N. H.

The process employs the principle of feeding a powder into a high velocity gas stream which has been ionized by an electric arc. The ultra-high temperature "plasma" stream melts and carries the particles and impinges them at high speed on the work piece, producing a dense, tightly bonded coating.

Applications in the textile industry include wear resistant coatings for the numerous wear points found on textile machines. These coatings can be applied to prolong the life of new equipment or for replacement or worn parts in the mills.

(Request Item No. L-45)

New Turbo Units

Three new Turbo machines are described in three bulletins just issued by Turbo Machine Co., Lansdale, Pa. The bulletins describe the Turbo Model DC Crimper for synthetic tow production; the Turbo Electric-Finisher for use with woolens, wool blends and high-pile fabrics; and the Turbo rotary dyeing machine which has outside drive, no gears and bearings within the vessel.

(Request Item No. L-46)

Encapsulation Of Random Wound Stators

Motors subjected to moisture, chemicals, abrasive dust, carbon black and many other contaminants can now receive added protection and give superior long-term performance by having the windings encapsulated during re-winding with RTV (room temperature vulcanizing) silicone rubber from the General Electric Co., Waterford, N. Y.

An illustrated, 4-page bulletin available from the company's silicone products department lists the advantages of the RTV silicone rubber system and describes in detail a proven no-mold method of stator encapsulation to help eliminate motor failure under severe operating conditions.

This publication is recommended not only to users of motors subjected to rigorous operating conditions who operate their own repair shops, but also to plant maintenance people who are called upon to specify the best system for protecting motor windings. The publication outlines the method of encapsulation and preparation of materials and equipment in sufficient detail to serve as a guide for motor rewind shops.

By encapsulating stator windings with RTV silicone rubber, dripproof motors can now be used in many atmospheres which previously required the protection provided only by more expensive totally enclosed units.

(Request Item No. L-47)

Strapping Methods And Tools

Signode Steel Strapping Co., Chicago, Ill., has released a 40-page booklet entitled "Better Ways to Package and Ship." Material in the booklet includes descriptions of compression strapping and jib crane systems and information on the recently developed heavy-duty Model TH feed wheel tensioner, the air-powered RCNS sealer, and new dispensers and strap cutters. A new list of 12 strapping pointers is included to help shippers achieve superior results at less cost.

(Request Item No. L-48)

Power Distribution

A new 48-page bulletin from General Electric, Schenectady, N. Y., outlines principles of planning industrial power distribution systems for safety, reliability and economy while retaining flexibility and provisions for future expansion. Bulletin GEA-7139 includes chapters on choosing voltages, short circuit calculations, protective relaying, selection of unit substations, power factor corrections and grounding.

(Request Item No. L-49)

Cutter-Winders

H. W. Butterworth & Sons Co., Bethayres, Pa., has issued a new 4-page bulletin describing its line of cutting and winding equipment. The illustrated bulletin describes the Emco rotary cutter-winder, which is for use with various fabrics such as sanforized cloth, carpets, etc.

(Request Item No. L-50)

Horizontal Conveyors

Five types of horizontal power conveyors are described and illustrated in a new 8-page, 2-color bulletin issued by The Rapids-Standard Co., Grand Rapids, Mich. Product and installation photographs show the APC (adjustable pressure) conveyor in wheel and roller models, live-roller conveyors, belt-on-roller conveyors, table conveyors and turntable conveyors. The turntable conveyor is used in conjunction with other conveyor equipment to make directional changes in minimum floor space.

Specifications are included for all types of conveyors discussed, covering standard lengths, widths, speeds and horsepower requirements. Specifications for turntable conveyors cover diameters, speeds and horsepower requirements are included.

(Request Item No. L-51)

Speed Measurement

Jones Motrola Corp., Newark, N. J., has published a new catalog containing photographs, drawings and descriptions of 19 distinct types of its tachometers, together with drawings of various types of flexible shafts and drives and drawings of various drive arrangements.

(Request Item No. L-52)

Chemical Feed System

A data sheet published by Milton Roy Co., Philadelphia, Pa., describes how a South Carolina mill effected substantial savings with an automatic chemical feed system to desize greige goods. The system is credited with substantial savings in chemicals, capital investment and direct labor costs while providing more uniform processing of greige goods.

To desize greige goods following singeing, it was formerly necessary to prepare enzymes and wetting agents in batch tanks and feed them by gravity to the quench box through manually regulated valves. To increase production, the cumbersome batch tanks were replaced by automatic controlled volume pumps which now meter the concentrated solutions directly from the storage tanks to the line without prior dilution.

A rotary displacement type meter, equipped with an electric contactor, totalizes the hot water to the quenching saturator and paces a 4-way solenoid valve controlling the air supply to the air pistons of the pumps. As each pump makes a complete stroke in direct ratio to the flow of water through the meter, the concentration of the make-up solution is always constant. The concentration can be changed simply by turning a dial to adjust the stroke length of the pumps. The capacities are infinitely adjustable from their maximums down to zero.

(Request Item No. L-53)

Radiant Comfort Heaters

Chromalox far-infrared electric radiant comfort heaters are the subject of a new 4-page bulletin now available from Edwin L. Wiegand Co., Pittsburgh, Pa.

The publication features illustrations, application information, features and specification data. The copy points up the many advantages of localized electric radiant heating for maximum individual comfort in industrial establishments.

(Request Item No. L-54)

Textile Casters

Faultless Caster Corp., Evansville, Ind., has published a folder, No. 83060, which features eight series of textile casters. This folder shows both the Swivel-plate and the rigid-plate casters, with wheels ranging from 3 to 8" in diameter and with load ratings of 60 lbs. to 750 lbs. each, which were designed for roving trucks, lap trucks and doff boxes.

(Request Item No. L-55)

Safety Course

A study-by-mail safety course for industrial foremen, developed by the National Safety Council is designed to provide an effective means of developing supervisory safety skills while keeping these key men on the job. Emphasizing the basics of accident prevention, the course provides supervisory safety training during a foreman's at-home hours. The course has been pretested by foremen in all types of industry, the council reports.

Success of the pretest is said to indicate that safety can be taught effectively away from the job site. Full details are available from Len Smith, director of industrial training, National Safety Council, 425 N. Michigan Ave., Chicago, Ill.

Fibers, Yarns and Fabrics

A limited reprinting of "Textile Fibers, Yarns and Fabrics" by Ernest R. Kaswell has been undertaken by Fabric Research Laboratories Inc., 1000 Providence Highway, Dedham, Mass.

The hard-covered reprints were prepared by F.R.L. principally as a service to textile colleges who wanted to use the book but could not obtain copies of it. Limited additional copies are available from the company at $12.

Fiber Handbook

The second edition of the *Handbook of Textile Fibers* by J. Gordon Cook has been published by Merrow Publishing Co., England. The author spent many years as a fiber research chemist with Imperial Chemical Industries Ltd.

The book divides all fibers into the basic classifications of natural and man-made. The natural fibers are grouped according to their origin, i.e., animal, vegetable or mineral. The man-made fibers are divided into regenerated and synthetic fibers.

The information on individual fibers is arranged in a pattern which is basically the same for all fibers. An introductory section describes the source of the fiber, its historical and economic background, and the forms and sizes in which it is available.

This is followed by a production and processing section, in which the methods of production or manufacture are described and processing information is outlined. Special attention is given to dyeing techniques.

Another section deals with the structure and properties of the fiber. Cross-section and longitudinal microscopic views of the fibers are provided, together with stress-strain diagrams.

Finally, there is a section on the fiber in use which describes the behavior of the fiber in practical use, with special reference to wearing properties, laundering, crease-retention and wrinkle resistance, suitable ironing temperatures, dry-cleaning and the types of fabric for which the fiber is suitable.

The book is available from Merrow Publishing Co., 276 Hempstead Rd., Watford, Herts, England, at $4.50.

Serving The Textile Industry

Dixon To Sell Through Factory-Trained Engineers

Dixon Corp., Charlotte, N. C., and Bristol, R. I., has announced completion of plans to sell, service and engineer its drafting changeover products through direct factory-trained engineers with headquarters in Charlotte. Up to the present time, Dixon has used sales representatives in conjunction with factory service men.

Dixon now has in the Southeast six full time factory trained direct sales and service personnel covering Virginia, North and South Carolina, Georgia, Alabama and Tennessee.

The corporation will move its entire textile manufacturing facilities, along with engineering, research, development and executive offices to the Charlotte area during 1961. Present relocation of the sales offices to Charlotte is an initial step in the moving program.

C & K Earnings Up 77% In First Three Quarters

A 77% increase in profits and a 30% increase in sales has been reported by Crompton & Knowles Corp. for the nine months ended September 30. Earnings for the period totalled $1.7 million as compared with $974,000 in the first nine months of 1959.

Frederick W. Howe Jr., president, said that sales and earnings are expected to be good for the final quarter of the year. Results for all 1960 will be substantially higher than those of last year, he reported.

Former Employees Re-Open U. S. Bobbin Co.

A group of former employees of U. S. Bobbin & Shuttle Co., which closed shop early this year because of unfavorable business conditions, have joined together to form the U. S. Bobbin Co. as a successor to the dissolved corporation.

The new company is headed by Jack Locke who served as president of the former corporation some 28 years. M. L. (Johnny) Johnston, former field representative for U. S. Bobbin & Shuttle, is vice-president and secretary of the new firm.

The group has converted the old Batesville Cotton Mill in Greenville, S. C., into a wood turning shop equipped for the production of loom bobbins, warp bobbins, card room bobbins, cones and custom specialties. In addition to machinery and equipment obtained from its predecessor, U. S. Bobbin has also purchased the complete manufacturing facilities of the Johnson City (Tenn.) Wood Working Co. Current capacity of the firm is 100,000 to 125,000 small bobbins weekly.

Saco-Lowell Shows Profit In First Nine Months

Saco-Lowell Shops, Boston, Mass., reports earnings of $897,640 for the first nine months as compared with a net loss of $2.1 million in the same period of 1959. It is anticipated that earnings for the fourth quarter, including favorable year-end adjustments, will exceed substantially those reported for the third quarter.

Maremont Automotive Products Inc., holder of more than 51% of Saco-Lowell's stock, has advised the company that it proposes to make an offer to exchange certain of its securities for the remaining outstanding shares of common stock of Saco-Lowell.

Bennett Rose Co. Name Changed To Burdette Mfg.

Burdette

The Burdette Mfg. Co., producer of materials handling equipment for the textile industry, has succeeded the Bennett Rose Co., Roebuck, S. C. Established in 1955, the company produces four-wheel trucks and dollies, boxes, loom stands, and shelves and racks made from fiber, plastic, steel, aluminum, and stainless steel. It also fabricates metal parts to specifications.

Thomas C. Burdette, the succeeding firm's president and treasurer, purchased controlling interest several months ago. He was formerly vice-president and general manager of Metal Products Inc. He is a 1948 graduate of Georgia Tech, with a degree in mechanical engineering.

Cluett, Peabody Profit Up 37% In First 9 Months

Cluett, Peabody & Co., New York City, reports an increase of 37% in sales in the first nine months of 1960. Sales for the period were up 2.7%. Earnings for the first nine months were $3 million as compared with $2.2 million in the comparable period of last year. Sales totalled $79.6 million as compared with $77.4 million previously.

For the third quarter, earnings were $1 million on sales of $28.6 million. This compares with earnings of $1.2 million on sales of $29.3 million in the third quarter of 1959.

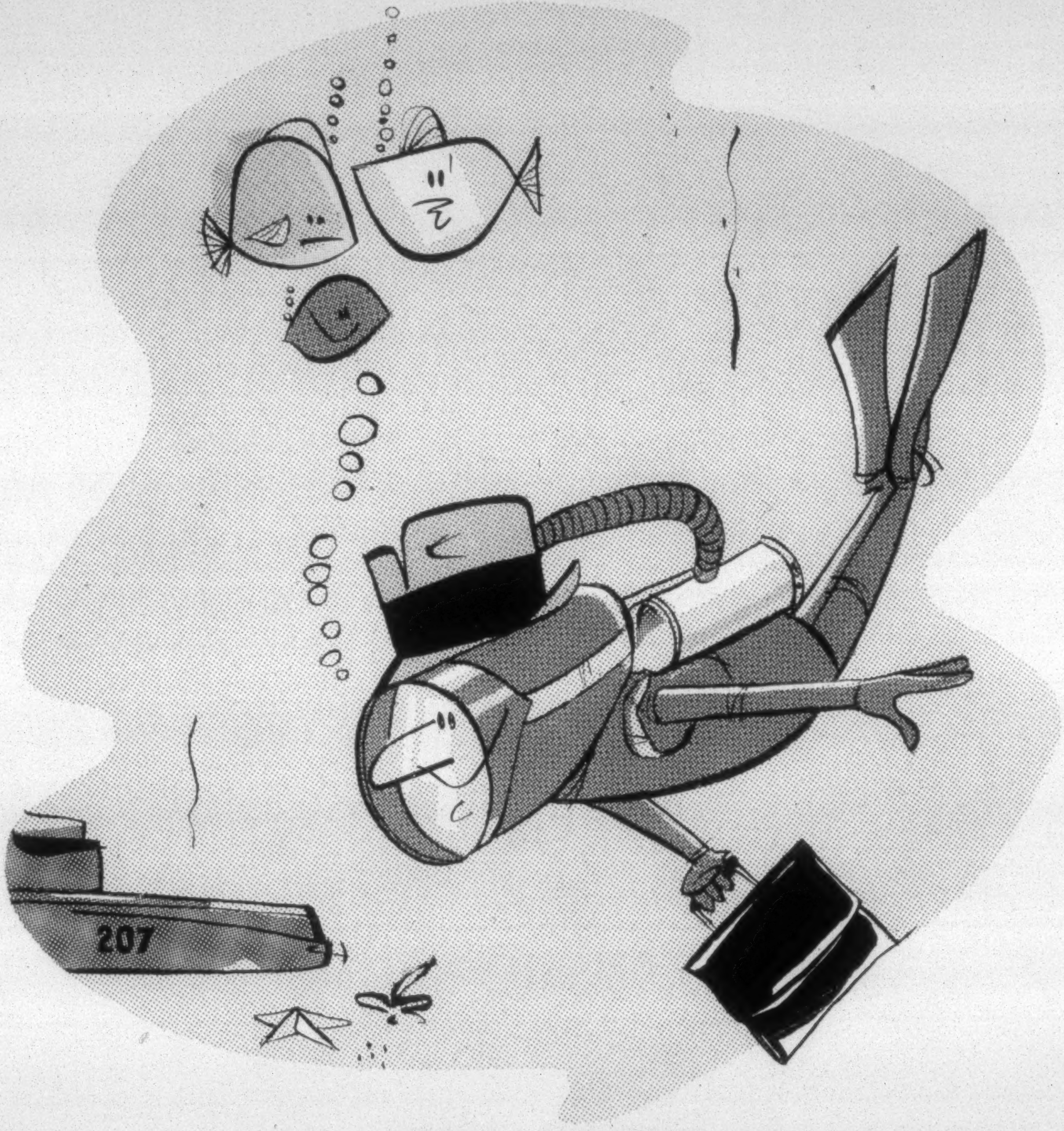
Celanese Plans Extensive Ad Campaign For Fortrel

An extensive advertising campaign on behalf of its Fortrel polyester fiber is being planned by the Celanese Corp. of America, New York City. The advertising will support Fortrel in its use in women's outerwear, lingerie, children's wear, men's and boys' wear and piece goods. It will include full-color multiple page sections in some 17 major magazines. Celanese is sending to retailers resource information which includes the name of the cutter, type of garment, name of the converter, type of fabric, content and the name of the mill producing the fabric.

The company also recently arranged a big-screen projection color television program for executives, department heads and apparel buyers of leading stores. Fabrics and apparel containing Fortrel were shown and modeled on the program. The company has also prepared hang-tags for use on finished garments of Fortrel.

Eastman Chemical Opens Providence, R. I., Office

Eastman Chemical Products Inc., New York City, a subsidiary of Eastman Kodak Co., has opened a new dye sales office in Providence, R. I. Located at 888 Broadway, this office will serve dy-



"Dillard salesmen go everywhere!"

Dillard PAPER COMPANY

GREENSBORO • CHARLOTTE • RALEIGH • WILMINGTON • WINSTON-SALEM • ATLANTA • MACON • AUGUSTA
GREENVILLE • COLUMBIA • SPARTANBURG • ROANOKE • BRISTOL • RICHMOND • KNOXVILLE • BIRMINGHAM

1926 "IF IT'S PAPER" 1960

ers and finishers of synthetic textiles in New England and upper New York state.

C. F. Getsinger, a sales representative for the past eight years, is now in charge of dye sales activities in this area. He was formerly located in the company's sales-service center in Lodi, N. J.

Man-Made Fiber Industry Reports Phenomenal Growth

The man-made fiber producing industry, launched in the U. S. with a single fiber 50 years ago, now produces 12 fibers in 88 plants costing $1.9 million to build and equip, according to the Man-Made Fiber Producers Association.

The industry employs 64,320 persons who received more than $351.6 million in salaries and wages last year. Of these, 48,500 are production employees. The industry has an investment in plant and equipment of $38,788 per production worker.

The U. S. man-made fiber producing industry leads all other nations in productive capacity. In 1959, it had 2,300 million pounds of capacity, or 29.1% of the 7,900 million pounds of world capacity (exclusive of Communist Europe for which complete data are not available).

These figures are part of an industry-wide survey to be released next month by the association in a book titled "Man-Made Fibers Fact Book." According to the association, it deals with the contributions the industry makes to the national economy, consumer acceptance of man-made fibers, trademarks as related to generic names, and other subjects of general interest.

Du Pont Reports Decreased Profits In Third Quarter

The Du Pont Co. has reported consolidated net profit of $92.5 million for the quarter ended September 30 as compared with $107.5 million in the comparable quarter of 1959. Sales for the quarter totalled $531.3 million as compared with $543.5 in the same quarter of 1959.

For the nine months ended September 30, net earnings were $295.3 million on sales of $1,628.4 million as compared with earnings of $323.6 million on sales of $1,611.7 million in the same nine months of 1959.

The company's earnings from operations were $60.6 million in the quarter against $75.5 million in 1959. Earnings from operations in the nine-month period totalled $196.6 million against $227.1 million in the comparable nine months of 1959.

Chemstrand Corp.'s New Nylon Plant In Operation

Chemstrand Corp.'s new Greenwood, S. C., nylon plant has started operations, the company reports. The new facility has a capacity of 10 million pounds a year. Robert L. Granger is plant manager of the new operation. Prior to the start up of this facility, Chemstrand's entire production of nylon was located at its Pensacola, Fla., plant.

American Enka Corp. Closes Chattanooga, Tenn., Office

American Enka Corp. has closed its Chattanooga, Tenn., district sales office. The closing of the office is in line with Enka's plan of centralizing its marketing personnel and activities at Enka, N. C. The company transferred its marketing division to Enka from New York City last March.

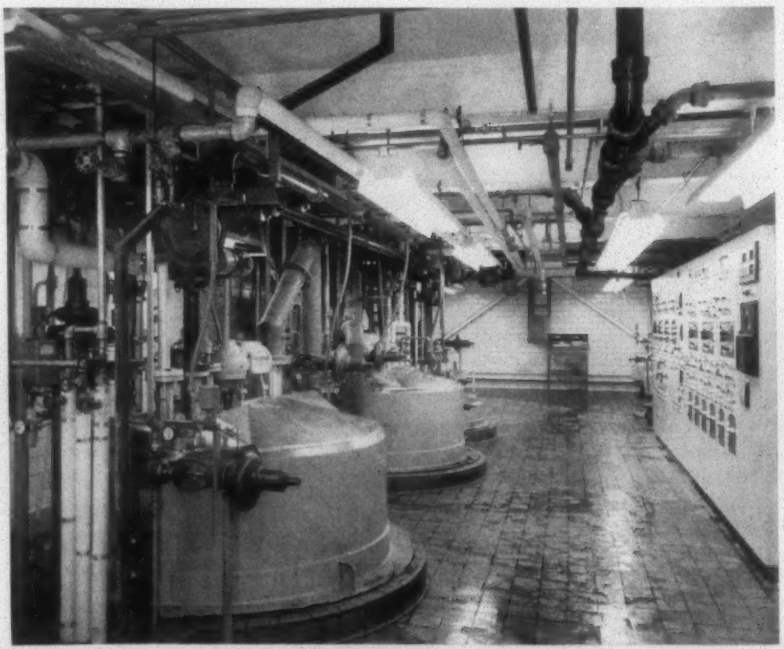
The Duplan Corp. Moves New York Sales Office

The New York sales office of the Duplan Corp. is moving from its present location at 1407 Broadway to new quarters at 6705 Empire State Building. Duplan, a major throwster, has plants in Winston-Salem, N. C., Kingston, Pa., and Cleveland, Tenn.

Record Profits Reported By Allied Chemical Corp.

Allied Chemical Corp., New York City, reports record high profits in the first nine months in spite of a 9% decline in third quarter profits. For the nine months, net earnings were $41.5 million on sales of $588.6 million as compared with net earnings of $39.7 million on sales of $546.7 million in the first nine months of 1959.

Third quarter net profit was $10.7 million on sales of $187.5 million as compared with $11.8 million on sales of $174.2 in the third quarter of 1959.



NEW FIBER GLASS PLANT NOW IN OPERATION—Owens-Corning Fiberglas Corp. now has in operation its new multi-million dollar glass fiber plant in Aiken, S. C. The 900,000-square-foot plant will have a production capacity of 70 million pounds a year. Processing equipment includes newly designed gas-fired furnaces to melt and refine the glass, new fiber forming and winding equipment, new twisting machinery for producing larger and more uniform packages, electronic yarn testing equipment, an electronic production recording system, and the world's largest overhead electrical monorail system. The plant is the company's fourth for production of glass fibers. Other textile product plants are in Anderson, S. C., Ashton, R. I., and Huntingdon, Pa.

With Dixon's all-new CAVALLA-ROTH* DRAFTING

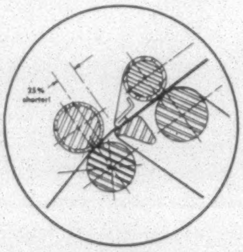
*Pat. Applied for.

. . . the pay-off is in the package!

Cavalla-Roth out-features them all. Into this advanced spinning drafting changeover, Dixon engineers have built advantages not obtainable even on the newest spinning frames. And each of these design firsts is aimed at giving you one thing: top quality yarn at lowest cost per pound.

Cavalla-Roth gives full fiber control —

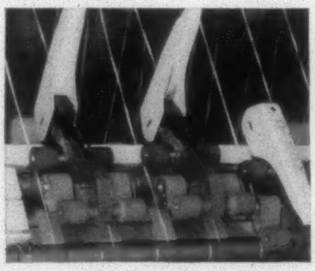
Specially shaped apron nose bar and tensioned lower apron reduce by 25% the uncontrolled space between middle and front rolls. Here, at the critical point in the drafting process, Dixon's unique system controls the fibers, assuring new strength and evenness in the yarn you produce.



Cavalla-Roth sets a new high in LOW MAINTENANCE —

This is the only NO OIL changeover available. All bearings — both for top rolls and bottom steel rolls — are either of Dixon's exclusive "lube-less" RULON or of the "life-lubed" anti-friction type. Cavalla-Roth's clean Tension Weighting system cuts out dozens of lint-catching surfaces . . . there are absolutely no springs, weights, stirrups or levers below the steel rolls to collect lint and up cleaning costs. And of course, improved fiber control reduces the problems and costs of ends down. Actual mill experience proves this new system is a real maintenance miser.

Cavalla-Roth Weighting — PERMANENT YET INFINITELY VARIABLE . . . ACCURATELY MEASURABLE



The new Tension Weighting system permits positive and permanent setting of top roll weight within a 100 lb. range . . . and most important, allows for accurate measurement of this setting with Dixon's Tension Meter. There are no levers or springs to build up friction, lose adjustment, and vary weighting. The C-R top arm (automatic cam latching) simplifies spinners supervision by making possible roll examination or service without time consuming weight lifting or hand latching. Roll spreads can be adjusted for drafting up to 1 9/16" fibers in two zone drafting and up to 3½" fibers in single zone drafting.

Cavalla-Roth gives APPLICATION FLEXIBILITY

Cavalla-Roth drafting can be tailored to meet your needs: 1) as a complete unit from roller beam up on 60°, 45° or 30° roll stands, 2) as a changeover, using the mill's middle and back steel rolls, 3) as a top roll changeover, using the mill's stands and steel rolls, or 4) as Cavalla-Roth P.C.O. . . . a partial changeover providing the advantages of better fiber control at a minimum cost per spindle.

For photos, engineering specifications, and costs of Cavalla-Roth, write:

Dixon Corporation • Bristol, Rhode Island
Plants in Bristol, R. I. and Charlotte, N. C.
Sales and Service representatives throughout the Industry

Dixon

ENGINEERED SPINNING CHANGEOVERS SINCE 1876

New ®TERMACO **AUTOMATIC HOPPER FEEDER**

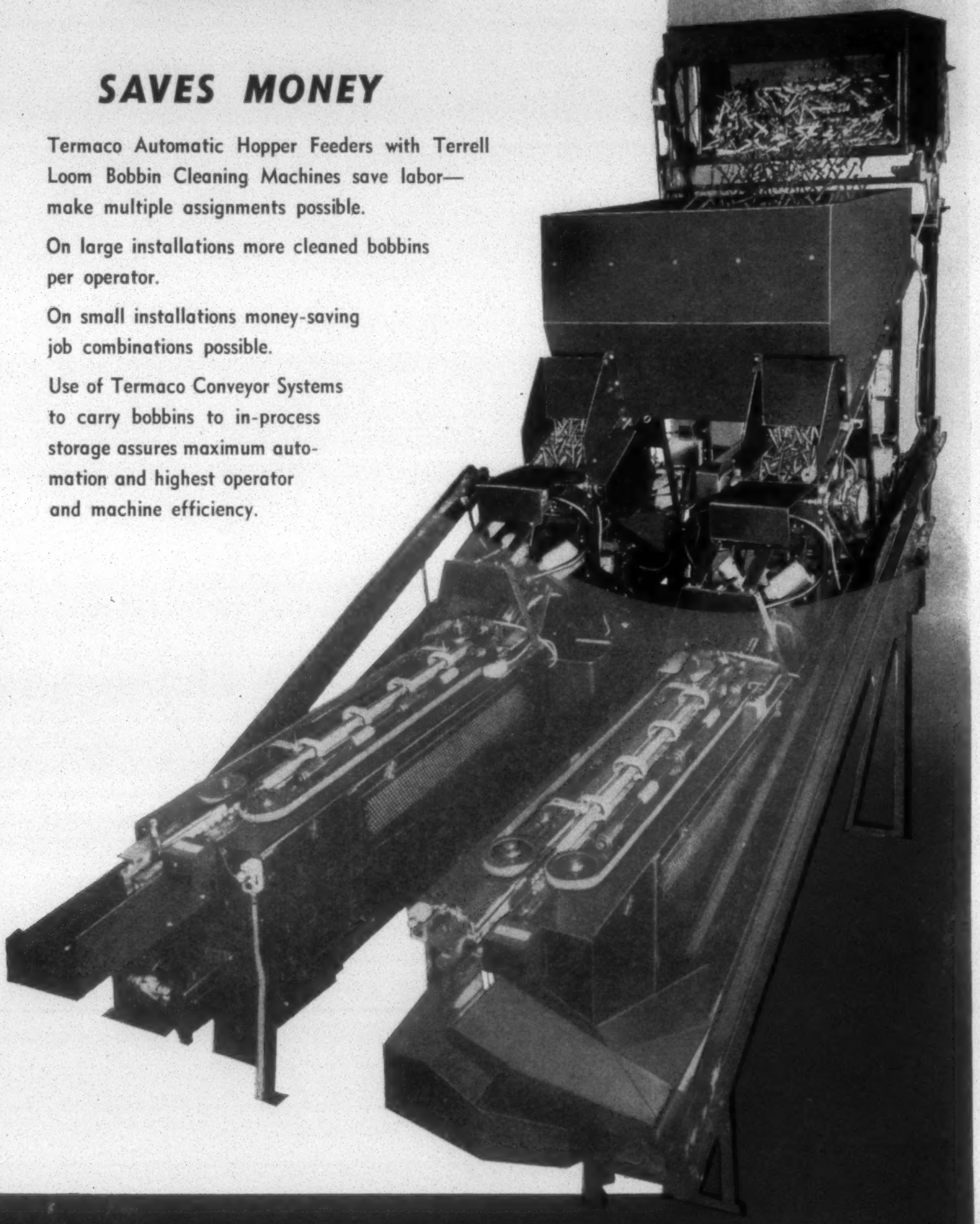
SAVES MONEY

Termaco Automatic Hopper Feeders with Terrell Loom Bobbin Cleaning Machines save labor—make multiple assignments possible.

On large installations more cleaned bobbins per operator.

On small installations money-saving job combinations possible.

Use of Termaco Conveyor Systems to carry bobbins to in-process storage assures maximum automation and highest operator and machine efficiency.



A TERRELL ENGINEER WILL SHOW YOU HOW YOU GET FASTEST RETURNS POSSIBLE ON INVESTMENT

THE TERRELL MACHINE COMPANY, INC.

Post Office Box 928 3000 South Boulevard

CHARLOTTE, NORTH CAROLINA

textile bulletin

VOL. 86 DECEMBER 1960 NO. 12

Your Supervisors: Are They Pros Or Peons?

HERE ARE SOME COMPARISONS BETWEEN THE TWO; IT'S UP TO YOU WHICH TYPE MAKES YOUR TEAM

By **PATRICK J. COMER**

CORPORATE success is nothing more than the success of the different individuals who make up the corporate organization. And in an organization large enough to utilize middle management the effectiveness of that organization depends on whether you have "peons" or whether you have "pros" carrying out the responsibilities of middle management.

Isn't that right?

It makes the difference:

between profit and loss
between a good and a poor public reputation
between good safety and poor safety
between lots of absenteeism and very little absenteeism
between excessive turnover and reasonable turnover, etc.

Every problem that a large corporation has — or a small corporation that has to depend upon middle management— can usually be brought back to the question of whether we have "peons" or "pros" in our front line supervision. I think you would agree that that is right.

Let's take a look at the extremes in supervision. And then let's see if we can come up with some practical and perhaps some inexpensive ways that we could go toward the more favorable extremes. I know the words "peon," "pro," "have" and "have not" are rather strong, but let's take a look at the man in supervision who is a "have not."

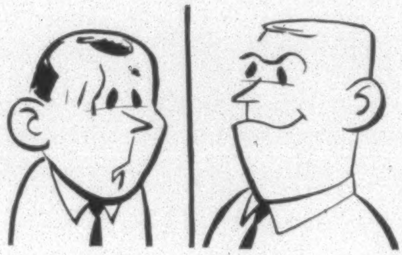
"Mr. Have Not"

You recognize "Mr. Have Not" any time you visit a competitor's plant. Of course, you never recognize him in your own plant, I know that. But every time you go to a competitor's plant, you recognize "Mr. Have Not" when you see him ostensibly supervising work in a department. He is "Mr. Have Not" because of several characteristics.

Ordinary Looking

First of all, he's ordinary looking. I don't mean that he's not handsome or that he's not a Don Juan in appearance— but he's just an ordinary looking fellow. You go into the department and you can't tell by looking around who's in charge.

It ought not to take a white shirt and a tie to differentiate the professional foreman from the people he's supervising. There ought to be something about that man that makes him stand out.



Mr. Have Not and Mr. Have can be recognized instantly even though they may be dressed alike.

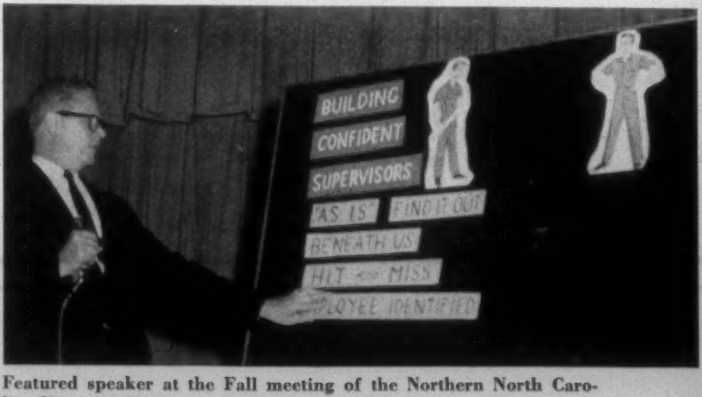
But "Mr. Have Not" does not stand out. He's just an ordinary looking man. He is a "beat" looking man. He is a hiding man.

Uncertain

He's uncertain. He's uncertain of his prerogatives and authority, he's uncertain as to how he should approach you, the stranger, as you visit your competitor's plant. He's uncertain about how to handle problems. And many times rather than either going for information or taking the aggressive attitude toward solving problems, he just lets them go on by the road, because he's uncertain.

Withdrawing

He is withdrawing. He tries to make himself as incon-



Featured speaker at the Fall meeting of the Northern North Carolina-Virginia Division of the Southern Textile Association was Patrick B. Comer, management consultant.

Mr. Have Not is tongue-tied . . .

. . . he is defensive

spicuous as possible, and he is not the type of person who seeks to stand out and to exert leadership that his people are looking for. Or that they want. And that management expects of him. He withdraws.

Tongue Tied

He's tongue tied. You ask him a question about the operation that he's doing in his department, and you would think he had never seen them before. You wonder where in the world he's been for the 20 years that his boss says he's been on the job. Certainly not learning anything about the operation. Because when you ask about them, he can't explain so that you could understand even if you knew something about the work.

Defensive

He is, unfortunately for you if you have him, defensive. I mean by defensive that he's trying to protect something that may be wrong or that may be bad rather than trying to lay these things aside and be progress minded. So that when you're looking into a very serious and costly problem—of quality, for example—this man is of no help to you at all. You have to get someone and go at it and dig the facts out for yourself because he's going to try to protect himself, and to defend himselt at all costs rather than try to be a part of a progressive management team.

No Initiative

He has no initiative. You always have to go in and tell him his costs are excessive; that quality is getting away from him; that absenteeism is high; that his accident record is too high; that the place is dirty. He never comes to you. You always have to go to him. He has no initiative. In effect, as far as being a member of management is concerned, he's dead. You just haven't fired him yet.

"Mr. Have"

Now let's look at "Mr. Have." There's a noticeable physical difference between "Mr. Have" and "Mr. Have Not." "Mr. Have" commands attention. You don't have to ask who is the boss when you go into "Mr. Have's" department. Instantly, and without any differentiation as far as clothing is concerned —he may be just as greasy and dirty as the greasiest and dirtiest person in the department—but you know he's the man in charge. He commands attention.

Sure Of Himself

He is sure of himself. He knows the limits of his authority. He knows how far he should go. He knows what he should do. He takes an aggressive attitude. He's a very warm person. He's a man people can get to, people can talk with. Employees feel they can confide in him. He expresses himself well. You ask him a question and he gives you an intelligent answer. He knows how to talk about his job, and he knows how to talk with his employees, and with visitors or strangers if necessary.

He's Frank

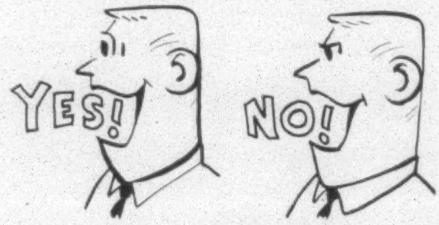
He's frank. If there's something wrong in a department, usually he's the one to bring it to your attention. You don't have to go tell him about it. But if a complaint comes in or you see him about something, he's very frank about it. He's willing to look into it.

. . . he tries to make himself as inconspicuous as possible.

USE IN CASE OF FIRE
PULL HANDLE IN CASE OF FIRE

. . . he is uncertain.

Mr. Have expresses himself well . . .



. . . he is sure of himself.

He tells you, "I'll look into it right away. I'll find out what the answer is." He isn't trying to defend himself as "Mr. Have Not" is. He isn't giving you excuses.

He's ingenious. He's constantly injecting into his work new ideas and creativity. He's bringing to you ideas in many cases that go beyond his particular department. He's company minded. He's aggressive. And he's growing. You can count on this man when the time comes to staff a larger position because he's going to be preparing himself on his own to be ready for that position.

Now you've seen the difference between "Mr. Have" and "Mr. Have Not," I'm sure. They are very real—and very important to your employees, very important to your company.

Whose Fault Is It?

Let's see some of the differences in the way that we promote a supervisor who is going to be a "have not," and the way we promote a supervisor who is going to be a "have." I maintain that it is not, in many cases, the potential supervisor's fault. The fault oftentimes lies clearly on our own shoulders.

Tag, He's It

"Mr. Have Not" is usually jerked out of the ranks and promoted just as is.

They just say, "Joe, you're going to be in charge Monday morning."

He says, "Thanks."

And he goes on his way. And you let him know that he's got to find out the hard way. He's got to find out how to do his job, find out how to supervise, find out the routine.

Oh you do give him a little help. If he gets in trouble, he can go and ask somebody. But he's got to find out the hard way. And there are a few people still left, particularly in the textile industry, who feel that "Well, that's all right. That's the only way to learn it. Let him learn it the hard way. That's the way I did. That's good for him."

Well, I contend that it will make a "Mr. Have Not" out of him. And then we treat him like he's beneath us. I know this hurts, but it's true. We never really feel like he's a member of management. He's sort of a "hired peon," and that's why he behaves like a hired peon. We get across to him our feeling that he's really not one of us. He's not really on the management team, and he feels this. We let him get by with hit-and-miss methods of finding out the limits of his authority. If he goes too far, we slap him down. If he doesn't go far enough, we kick him. And we'd let him find out the basic responsibilities by a hit-and-miss method.

So "Mr. Have Not" remains employee identified.

New Identification

"Mr. Have," on the other hand, when he's brought into management, is given the feeling of new identification. Now you can do this in so many ways. To cite one particular case, a chemical plant down in Florida had to promote some 55 supervisors out of their ranks last year as their business expanded very greatly.

We had each of these men promoted on this basis. We called the man in and told him exactly why we had chosen him for the job of supervisor. Exactly what we thought his strong points and his characteristics were. We told him *at the same time* exactly some of the things that we thought he had to improve on—right then. We gave him this verbal list. We told him what we would expect of him. We told him what we would give him in the way of training; what we would give him in the way of information; and support.

Education

We give this man, "Mr. Have," the education required to handle his job. If you have two plants, I think it's a wonderful idea to pull a man out of one plant, and let him get his education over in the other plant. Then let him come back and supervise where you need him. If you only have one plant, then pull him off the job while you give him the education required.

How do you expect him to be able to handle payroll dif-

Cone, Joslin, Ward

Re-elected to second terms as heads of the Northern North Carolina-Virginia Division of the Southern Textile Association were Herman Cone Jr., Cone Mills Corp., Greensboro, N. C., chairman; A. L. Joslin, Dan River Mills, Danville, Va., vice-chairman; and Charles H. Ward, Highland Cotton Mills, High Point, N. C., secretary. Named to three-year terms on the division's executive committee were Frank Starling, Cone Mills Corp., Greensboro; John Houston, Spray Cotton Mills, Spray, N. C.; and J. W. Robertson, Washington Mills Co., Fries, Va.

ficulties if he has never seen how a payroll is made up? How do you expect him to be able to appreciate some of the difficulties in shipping and scheduling unless he's had an opportunity to see the problems and difficulties that customer sales people have in that respect?

I'm not saying make this ten years long or two years long or one month long—make it appropriate for your operation. But give him enough education so that he knows more than he did the day you jerked him out of the ranks. Remember that on that day he didn't know anything more than the people he was going to have to supervise.

You're going to give him all the skills that you possibly can for handling his job. You're going to provide him with new information about handling people. You're going to try to give him some of the basic, simple psychology about why people behave as they do so that he can handle these people on the job. In essence, this man, if you picked the right man to start with, is going to turn out to be a pro, a real manager, a man who stands on his own two feet with confidence, and who does an excellent job.

Barton, Joslin

Howard Barton Honored

THE Northern North Carolina-Virginia Division of the Southern Textile Association recently paid tribute to Howard Barton of Fieldcrest Mills, Spray, N. C., for his many years of faithful service to the group. Barton, who retired last year as secretary of the group after 19 years at the post, was awarded a special plaque November 5 at the division's regular Fall meeting at Greensboro, N. C.

In making the presentation, A. L. Joslin of Dan River Mills, vice-chairman of the N.N.C.-Va. Division, pointed out that "much of the success of this division has been due to Howard Barton's work since 1939 when he was first elected to serve on the executive committee."

Barton was elected vice-chairman of the division in 1941, and in 1942 was appointed secretary to fill the vacancy created when J. O. Thomas of Fieldcrest was called into military service. Except for one year when he served as chairman of the division, Barton continued as secretary until his retirement last year. He has been with Fieldcrest Mills since 1910 except for a period of eight months when he was with Cone Mills in Greensboro.

Supervisory Training

Every company does supervisory training. All companies do. Some of them, of course, do pretty negative supervisory training. They train supervisors to be "peons" rather than "pros," but every company trains supervisors, whether you realize it or not. It just depends on what kind of thinking goes behind it as to whether the supervisory training produces a "have" or a "have not."

You should make your supervisors aware of their responsibilities. I guarantee you that unless you have done this recently, your supervisors don't know what their responsibilities are. Isn't that right? Do they know *fully* what their responsibilities are? To the customer, to the employees, to the company, to themselves, to other supervisors? Develop fully their awareness of responsibilities.

Give them skills in human relations. And as you know there are no pat answers in any given situation. You can't give a supervisor a book and have him run up against angry employees, and open the book and say "Let's see, A, angry, yep, this is the way you handle it." You know that just isn't the way it is done. Give him some ways to appreciate the value of his behaving as a leader. We forget oftentimes how important we are to the employee we supervise.

Give him a part in making policy decisions. Don't just give him a policy and expect him to carry it out. Let him have a hand in it. Some times he can save you some trouble.

Teach him how to select and hire. Of course, you have a personnel department; and it does a lot of the screening for you.

I know a common complaint is that "We can't do this on the third shift because we bring in trainees and hire them, and then we send them to the third shift where they work for a while. So how in the world could the third-shift supervisor ever learn how to come down here? It wouldn't be practical for him to come down here and hire these folks."

I can guarantee you that it *is* practical. At Fulton Cotton Mills in Atlanta, Ga., they found out that they cut most of their early voluntary quitting out by doing this. And I understand that not a single night supervisor wants anybody any more that he hasn't seen. He'll take time off to come down there and do the hiring. He wants the final word. Because he knows when that employee reports at midnight to a stranger, to a person who had nothing to do with his getting a job, a man that he doesn't know, he's going to have an awful hard time trying to supervise that man or woman, and to bring them along.

So teach your supervisors how to select and hire. Be sure that they know how to train. Every supervisor does training. Does it pay off or doesn't it pay off?

Teach him how to analyze, to be analytical in his approach to problems. Put a premium on that. Teach him how to plan, so that he makes the best use of his time and his employees' time.

Expose him to top management contact and ideas. Let him know what your real top management feels and thinks. Take him with you on a trip when you can. I know already that many of you do this. By whatever way you can, let him know your top management's ideas and thinking.

All these things revolve around one basic principle. And that is to give this man management identification; to make him feel he really is a part of management. However you do this—and it's never ending program—you will be rewarded I'm sure, because the end result is greater judgment, and greater confidence on the part of your supervisors.

Card Web Classifying Eliminates Nep Counting

THIS NEW METHOD IS SAID TO BE MORE ACCURATE, FASTER AND LESS TEDIOUS THAN NEP COUNTING

By GUS GUGGENHEIM

NEP counting isn't necessary—even to the most nep conscious of mills, according to findings at The Kendall Co.'s Mollohon Plant, Newberry, S. C.

Nep counting, even at its best, is a slow inaccurate testing method. The work is tedious. Nep identification has never been defined so that average laboratory technicians can deliver replicate results. There is an ever-present question in the tester's mind about whether to count little neps, big neps, naps, motes, trash, etc. To top off the impossibility of the situation, the textile industry has never really decided whether to express the relative neppiness of a card web as: neps per 20 square inches; neps per 100 square inches; neps per grain; and other units of measure.

Nep counting can be eliminated entirely by a process of card web classification known as nep evaluation. The process was first developed by Kendall's Leon D. Pryor in 1956 in doing evaluation work on the Nepotometer. The process has since been perfected for mill routine quality control work. With this method of nep evaluation, the continuing production from a specific group of cards can be compared with permanent standards developed from the specific group of cards running comparable raw materials.

In concept, nep evaluation is exactly the same as the use of A.S.T.M. yarn appearance boards. Nep evaluation improves on yarn appearance boards in that the individual mill's own cards and raw materials are used in developing standards. Standards become not simply what some one thinks is good, but instead, an actual reflection of normal card room production.

Standards for nep evaluation are made by sealing off the card web sections between two sheets of thermoplastic polyvinyl acetate. The standards are easier to use than photographic standards, also similar to A.S.T.M. yarn appearance boards, because the web retains a three-dimensional effect while being permanently sealed.

Nep evaluation standards may be made in several ways. The web may be sealed between two sheets of clear plastic mounted on a black board. In another case, the web may be sealed between one sheet of clear plastic and another sheet of black plastic and then mounted on a white board.

Develop Standards

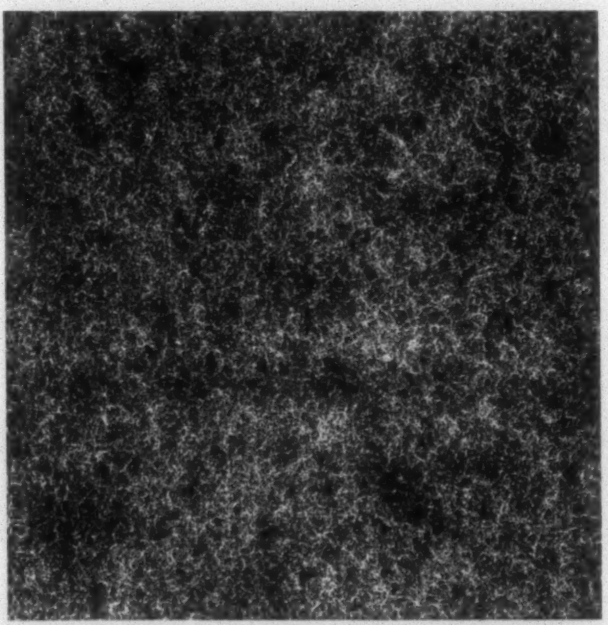
The first step in developing nep evaluation standards is to select several cards running good, average and bad webs. Samples of webs are taken from the cards and sealed in plastic sheets.

The sealed samples should be shuffled and then a letter of the alphabet assigned to each one.

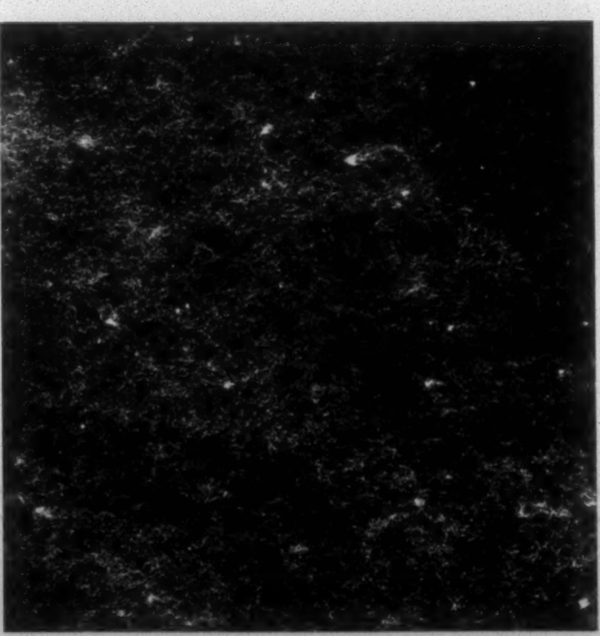
The next step in standard development is to select a group of people concerned with neps but not necessarily experts in nep classification. These people may be card grinders, second hands, overseers, superintendents, etc. Each person in the group views the samples and separates them into various categories: (1) good; (2) average; (3) bad.

Some mills may prefer to have only two classifications—good and bad or go and no-go. Other mills may want additional categories.

In the Mollohon Plant's standard development, classifiers



Sample of a good card web section sealed between two sheets of thermoplastic polyvinyl acetate.



Sample of an average or medium web.

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THE DARY RING TRAVELER CO.
TAUNTON, MASSACHUSETTS
LINDSEY I. PHILLIPS, Treasurer, Taunton, Mass.

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JOHN H. O'NEIL Box 720, Atlanta, Ga.
JAMES H. CARVER Box 22, Rutherfordton, N. C.
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For Highest Quality, Long Lasting Loom Parts —
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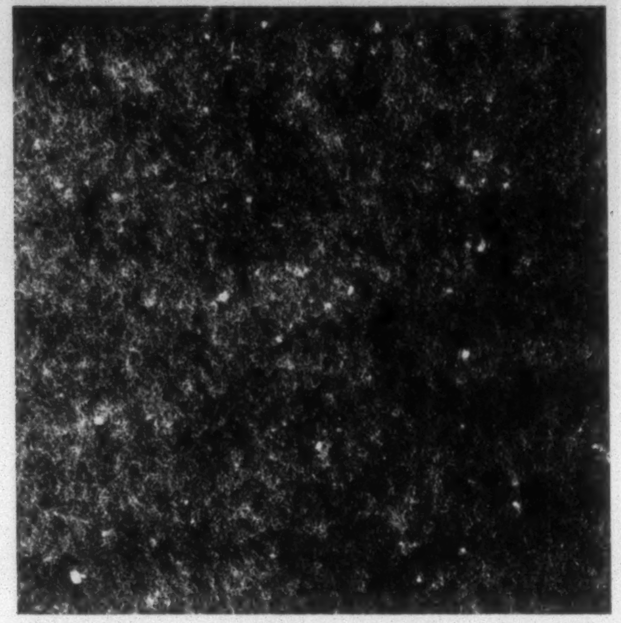


Sample of a poor web.

worked entirely independently of each other. A tabulation of all classifications was kept by one person. The samples which fell into certain groups most consistently were declared most representative of each group and the "standard" was set.

Once standards are set the evaluation of card webs can begin. Some questions to answer in this evaluation are: (1) How often should webs be evaluated? (2) When should the evaluation be done; before grinding or after grinding; before stripping or after stripping? (3) Why should webs be evaluated? (4) What happens to the test results?

A mill might give the following answers to these questions:

(1) Webs should be evaluated on each card once per week.

(2) The evaluation should be done without regard to grinding cycle since the level of neppiness at all times—not just before or after grinding—is the object of the program. However, all evaluation must be done at the same time relative to stripping—either before or after or at some intermediate time during the cycle.

(3) Webs should be evaluated to assure the grinding cycle is adequate to maintain the desired level of neppiness but not so frequently as to provide webs of too-high quality.

(4) Web evaluation test results should be maintained in permanent files for comparison from crop-year to crop-year. In this manner, grinding and stripping cycles can be kept up-to-date with cottons currently being run. It is probable that standards will have to be changed somewhat as the crop year runs out and new crop cotton starts into the mill. At any rate, the standards should be checked with revision in mind on a yearly basis.

The mechanics of web evaluation consist of: (1) mount standards on a large but light board; (2) obtain a black velvet covered board of an appropriate size and a plexiglas cover plate; (3) use two testers to evaluate webs; (4) one tester takes samples, compares them against standards, and calls results; (5) the other tester carries the board-mounted standards from card-to-card, and records the called classifications.

Quick and dependable nep evaluations are assured using this method. Nep standards are the vehicle to accurate evaluations but consistency of procedure is the key to the operation.

Georgia Textile Operating Executives Discuss

● SLASHING—SLASHERS, SIZE BOXES, CREELS, ETC.
● WEAVING—QUALITY CONTROL, SHUTTLES, CLEANING

Slashing

Question No. 1—What has been your experience with new multi-cylinder slashers with regard to production, in pounds per hour, when running the yarn through one and two size boxes? Also, have you had any trouble with pounds per hour reducing 15 to 20% after running your slashers approximately one year? If so, what did you do to correct this?

Mill A: On 10-cylinder slashers, 60 inches wide, rated at 50 p.s.i., we obtain a maximum of 1,200 pounds per hour. On an 11-cylinder slasher, 78 inches wide, rated at 65 p.s.i., we have obtained 1,750 pounds per hour; however, we have only run this slasher one month and expect to increase this production. On our 10-cylinder slasher we have not experienced any loss in production.

Mill B: Our production, 900 to 1,200 pounds per hour, remains the same whether in a single size box or double size box. We have not had any trouble with pounds per hour reducing.

Mill C: Our experience with multi-cylinder slashers has been very satisfactory, in regard to production. We use one or two boxes as needed. Production will vary considerably but pounds per hour remains fairly constant.

Mill D: We were able to run about 110 y.p.m. on some sets through one box where we were getting 100 y.p.m. through two. We did not have a reduction after one year.

Mill E: On our multi-cylinder slasher, seven cans, we increased the speed from 30 y.p.m. to 50 y.p.m., on 16/1 yarn, using: 688, 744, 754, 1,200 and 1,488 ends per warp. On 14/1 yarn, we increased the speed from 40 y.p.m. to 60 y.p.m. We use from 642 to 1,310 ends per warp. We run all our warps double set. We believe we get about 70% more yarn through the multi-can slasher than we did the old two-can slasher.

Mill F: We use one size box running 750 to 1,100 pounds per hour. This figure varies with yarn count. We have had no trouble with speed reduction but have noticed that failure to buff size box rolls will reduce speed.

Mill G: We find that the slasher speed is slightly lower when running the yarn through two size boxes. The production from our slashers is 15% lower than it was a year ago when the slashers were new. We have been unable to correct this.

Question No. 2—When operating multi-cylinder slashers with high pressure steam, do you use the same amount of steam on all cylinders? If not, how do you control your steam?

Mill A: We use the same pressure on all cylinders at present, but expect to test raising the temperature on the first four cylinders. Our slasher has two controls with one instrument controlling the first four cylinders and another controlling the others.

Mill B: We do not use the same pressure in all cans. Our steam is controlled in units of three-can sections. The steam pressure is greatest in the center section. The slashers have nine cans which are run to a maximum of 50 pounds.

Mill C: We use the same amount of steam pressure. However, we maintain a variation of cylinder temperature control by instrumentation.

Mill D: Our dryer is divided into sections of 4-4-3 cans with separate steam and condensate headers for each section and with separate remote controls for each section. We have run a style with 5,828 ends of 23s warp yarn at 65 y.p.m. with 18 pounds pressure in entering four-can sections, 14 pounds in four middle cans, and 12 pounds pressure in three cans at the delivery end.

Mill E: We do not use the same steam pressure on all cylinders. On 15s yarn, average run, we use 40 pounds of pressure on back section and 20 pounds of pressure on front section. On 10s yarn, average run, we use 50 pounds on back section and 40 pounds on the front section.

Question No. 3—From your experience, what is the best way to check the viscosity of size? (a) How often? (b) How much variation do you get and what do you consider a good range?

Mill A: Our size is prepared in a Sizeometer throughout the entire process. We have several size formulas and the Sizeometer is set on a predetermined viscosity reading before each batch is started. The Norcross has a 24-hour chart which records the viscosity of each mix and will automatically knock off when the size reaches the set viscosity. Every morning this chart is checked for correct viscosity, also the number of mixes made on each shift and at what hour each mix was made. A variation of ten points on the chart is 1% difference in size pick-up. We have a water meter to register the number of gallons of water per mix. Our starch is received in 100-pound bags so that we do not weigh it.

Mill B: We have a Norcross recording viscometer for each kettle. We also get checks once or twice weekly with a No. 2 Zahn cup. When the chart varies plus or minus 3 points with the Zahn cup, variations are checked to find out why.

Mill C: We send samples to Seydel-Woolley & Co. We do not have more than 1% variation.

Here are some of the highlights of the chief topics discussed by the Textile Operating Executives of Georgia at its regular Fall meeting on slashing and weaving. The meeting was held Oct. 22 at Georgia Tech in Atlanta.

Question No. 4—Describe your experience with the high temperature size cookers. Give type starch and size compounds used and type cloth run.

Mill A: We are conducting some experiments with the high temperature cooker. Our experience is very limited, but it appears that we will be able to do a satisfactory job using pearl starch and our regular paste-type size compounds. This size will be used in print cloth and various sheetings, including percale. This will enable us to stop buying the thin-boiling starch which we are now using in percale, thus giving us a considerable savings.

Mill B: We use the Nemo Jet Cooker. We use the 90 fluidity starch and a liquid softener on our pile warps and a 40 fluidity starch and a liquid softener on our ground warps.

Question No. 5—Give variation in size pick-up, if any, from running to creep speed.

Mill A: We had 1 to 2% less from run to creep speed. To overcome this, we added to each size box one three-way solenoid and a squeeze roll pressure control valve. To each two boxes we added two normally closed and two normally open contacts on a two-pole relay. The squeeze roll pressure control valves are pre-set to desired creep speed pressure. We have found from actual samples that 30 p.s.i. on running speed and 15 p.s.i. on creep gives very nearly the same pick-up.

Mill B: No variation is encountered. We have a Griffin size box and the bottom squeeze roll is disengaged at creep speeds.

Mill C: Our tests indicate no change in size pick-up when changing from running to creep speeds.

Question No. 6—How do you measure stretch on your slasher? What per cent stretch do you consider normal? Give type slasher, yarn number, number of ends, size of section beams, styles, etc.

Mill A: We measure stretch on the slasher with a counter on the back section beam and another at the front nip roll. We consider 1½% stretch to be normal. We have both Cocker and West Point high speed slashers, 11½s to 26s yarn, 792 to 6,710 ends, run from 60 to 130 y.p.m., 12½ to 14% size pick up, 54 to 72-inch section beams. We run sheetings, bedspreads, drill, twills, sateens, etc., with 82 different styles at present.

Mill B: We allow 100 yards per 1,300 yards for stretch. We use multi-cylinder type slashers with yarn numbers ranging from 4s to 22s. Our ends per set range from 1,400 to 6,000 and our section beams are 26 to 30 inches in diameter.

Mill C: We have the built-in stretch determinator on our West Point slasher. Average yarn number is 22s. We have 30-inch section beams and 4,000 ends. Normal stretch is 1 to 1½% on sheeting and 1½ to 2½% on type 4 twills and gabardine.

Mill D: We use a yardage counter at the size box entering roll and at the delivery roll at the front of the slasher. We consider 2% stretch normal on sateens with 5,556 ends of 17.25 carded yarns on a 40-inch diameter section beam.

Mill E: We measure stretch on the slasher by using two yardage counters, one on each extreme point to be checked. We run 100 yards, then stop the slasher. By comparing counters we can determine how much stretch is in the yarn. On dry work, we run about 1½% stretch for an average set of 1,520 ends, 16/1 on 26 to 50-inch loom beam, 3,800 yards, 412 pounds per beam. This is the old two-cylinder slasher converted into a three-cylinder slasher with 28 to 30-inch section beams. On wet work run on four-cylinder and hot air slashers, we run about 3½% stretch. Our average set has 5,800 ends, 14½s yarn on 26 by 66-inch Draper loom beams, 110 yards per beam, 580 pounds, 20 to 21 section beams per creel.

Mill F: We measure stretch on each set by subtracting the yards run from the yardage on the section beams. Our stretch runs about .75% on print cloth and about 1½% on wide sheetings. We have both hot air and four-can slashers. Our yarn numbers range from 9.50 to 34.00 and our ends from 1,750 to 10,500. We have 38-inch diameter section beams in lengths of 54 and 72 inches.

Question No. 7—What advantage is the ball bearing creel over the plain creel with rope weights on 36-inch and 40-inch beams?

Mill A: We found no advantage. We use a plain creel with a rope and a five-pound weight on each 40-inch section beam.

Mill B: We find the ball bearing creel runs more freely and has less wear.

Mill C: The weight of 36-inch and 40-inch section beams requires a bearing that is free turning, especially when running at high speeds. Friction in the bearing is more uniform with ball bearings.

Mill D: With the ball bearing creel, the yarn tension can be more uniformly controlled throughout the running of the beam.

Question No. 8—What size box have you found to give best results? (a) Have you used two size boxes in tandem? (b) From what type temperature control did you get the best results? (c) Do you find synthetic squeeze rolls as effective as blanket rolls? Front? Back?

Mill : We use West Point size boxes. (a) We use two size boxes, but split the yarn roughly in half. (b) Taylor temperature controls. (c) We use synthetic rolls on front and back.

Mill B: We have found the Griffin size applicator to be very satisfactory. (b) We are using Taylor controls and find them very satisfactory. (c) We like our synthetic squeeze rolls as well as our blanket covered rolls.

Mill C: We use the single Griffin box. (b) Brown M-H controls. (c) We find synthetic rolls more effective than blanket covered rolls.

Question No. 9—What experience do you have using rubber covered rolls on both front and back? Also what duromity, thickness and type do you use?

Mill A: We find that we get good results using rubber squeeze rolls on front and back provided we keep them buffed. We use seal skin rolls made by Stowe-Woodward Co.

Mill B: We have been using rubber squeeze rolls on the back roll of our slashers for several years and find that they do a very good job. We were unable to use them on the front rolls because they would not do a good job of dressing on the yarn.

Mill C: Our rubber squeeze rolls on front and back are very satisfactory. We are using rolls with an Adams density of 45 to 55. The rubber is 2½ inches thick over an iron core.

We do not know the type rubber used, but it is covered by Carolina Rubber Co.

Mill D: We have one two-roll size box. We use rubber rolls in both positions. Front is 38 durometer. Back is 42 durometer. We use seal skin rolls by Stowe-Woodward & Co.

Mill E: We are using tapered density synthetic rolls on back only. We tried using one on the front but did not get good results. We do not have any information on duromity, type rubber, etc.

Mill F: For our conditions best results are obtained with a blanket covered front roll and a rubber covered back roll. The rubber is one-inch thick.

Weaving

Question No. 1—What has been your experience with the link type parallels? Please give length of time and number in operation. What advantages, if any, have you noticed by its use in regard to cloth quality, loom efficiency, maintenance costs, etc.?

Mill A: We have 36 60-inch X-2 looms on link type parallels. It throws a truer shuttle and checking of the shuttle is easier. We think it is a better type parallel.

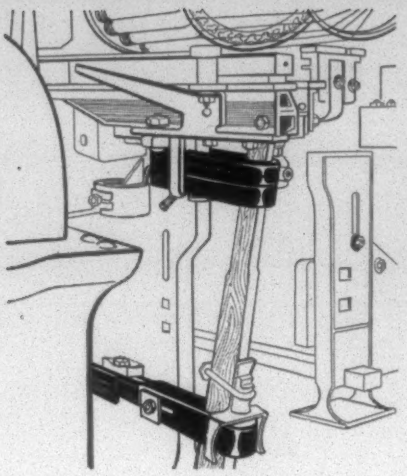
Mill B: We have 119 50-inch X-2 looms equipped with link type parallels that have been in operation approximately one year. We also have 45 60-inch X-2 looms equipped with the link type parallels that have been in operation only a few weeks. We are enthused with the link type parallel and consider it to be an advantage in loom efficiency, quality and supply cost. By a more constant control of power that is essential in shuttle life and leather, we feel that we have reduced supply cost. We also feel that with the link parallel giving a more constant power will reduce broken picks, therefore, improve quality. Also, a more positive boxed shuttle can be obtained with the link type parallels thus decreasing loom stops that would increase loom efficiency.

Mill C: We have 320 50-inch X-2 looms that have link type parallels. Some 100 have been in operation two years, 120 for 1½ years, and another 100 for six months. We are very well pleased with them and plan to equip other looms with link type parallels. In our opinion these parallels offer the following advantages: improved shuttle flight, better boring of shuttle, fewer warp and filling stops, fewer mechanical stops, requires less maintenance, and gives a reduction in supply costs. In our opinion, for best results, the No. 14 shuttle check should be used with the link type parallels. The above looms have both the No. 14 shuttle check and the link parallel.

Mill D: We have 94 looms with link type parallels. Some 39 of these have been running for three years. We cannot say that quality or efficiency has improved very much, but we do think that maintenance and supply costs are lower.

Mill E: We have 42 X-2 Draper looms running terry towels on link type parallels. We have been running them about five years and find them to be more effective than the old type parallels. We seem to run the looms with less power and get a smoother pick. We have a swinging reed motion on these looms. We find our maintenance costs to be no higher and loom efficiency and cloth quality to be better.

Mill F: We put 48 of these parallels on 44-inch X-2 looms and ran them about three years. Our experience while using



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dogwood shuttles was good, but we changed to plastic shuttles. After this shuttle was put in, we had trouble with too much power. To change the power requires a new arm. Our maintenance cost increased, due partly to the heavier shuttle, and partly due to the parallels being run making it necessary to replace worn parts.

Question No. 2—What method do you use for maintaining correct humidity and temperature in your weave room? (a) What type system? (b) Who is responsible for regulation and maintenance? (c) Are any written reports made? (d) Are any sling psychrometer readings made?

Mill A: We have a wash tower and wet bulb system, supplemented by atomizers. This is controlled by Johnson Service Co. controls. Our machine shop is responsible for regulation and maintenance. We do not have any written records, but we do use hydrometers and take sling psychrometer readings.

Mill B: We have an atomizer system that is maintained and regulated by shop personnel. We have charts recording the moisture and temperature of our weave rooms. These charts are kept on file by the maintenance department. Sling psychrometer readings are taken periodically to check out instruments.

Mill C: We use recorders which record temperature and relative humidity. The chart also shows time. (a) American Moistening and Bahnson Humiduct. (b) The mechanical shop. (c) No written reports unless we have trouble with our humidity. At times, our quality control department checks out the systems. (d) Yes, when we have trouble maintaining desired humidity.

Mill D: Electric recorders are used to control humidity and temperature. Twenty-four hour charts are used, and these are changed daily by maintenance men from our mechanical shop. These charts are kept in the weave room office for all supervisors to refer to. In addition to this, daily sling readings are taken at random. Any time a weaver asks for a check, we have the maintenance men check and adjust accordingly. (a) American Moistening air exchange system. (b) Mechanical department is responsible for regulation and maintenance. Weaving department is responsible for cleaning. (c) Yes, mostly with the battery psychrometer.

Question No. 3—What has been your experience with the No. 14 shuttle check? Give advantages, disadvantages, type loom, loom speed, and type parallel used. How does the replacement costs of such items as picker sticks, pickers, check straps, binders and shuttles compare to those looms equipped with conventional shuttle checks?

Mill A: We have put the No. 14 shuttle check on 200 60-inch X-2 looms, speed 160 p.p.m., with conventional type parallel. We were breaking picker sticks on these looms, and also having trouble boxing these looms. Since using the No. 14 shuttle check, these problems have almost been eliminated.

Mill B: We have 119 60-inch X-2 and 45 60-inch X-2 looms equipped with the No. 14 shuttle check. We find the advantage to be a more positive boxed shuttle and increased shuttle check life. As for disadvantages, we find it somewhat harder to box the shuttles. For replacement costs and life of pickers, picker sticks, binders, etc., we do not have the information available.

Mill C: Our experience with the No. 14 shuttle check has been very good. We believe the advantages to be: (a) better checking and boxing; (b) lower supply costs on pickers, picker sticks, check straps, binders, boxes, etc.; (c) requires fewer adjustments because humidity has very little effect on them; (d) new looms start up better. We have them running on 320 50-inch X-2 looms at 173 p.p.m. These looms are equipped with link type parallels. We had one group of 100 50-inch X-2 looms that had the conventional type parallel and the endless check strap that were giving us considerable trouble. We equipped the above looms with the link type parallels and the No. 14 shuttle check and this solved most of our problems.

Mill D: We have had this check on 76 looms for about eight months and find it very satisfactory. It permits better shuttle boxing, truer shuttle flight, better control of kinky filling, and less picker stick breakage. The only disadvantage that we have found is that the life of the endless strap is rather short. They are running on 82-inch XP-2 looms with link type parallels at 154 p.p.m. We cannot make a supply cost comparison since we do not have any looms with the conventional shuttle check running at this speed.

Question No. 4—What is the life of the plastic loop picker as compared to the conventional one? Also, give this same information about the drop box picker.

Mill A: We have run a few of these plastic loop pickers. We have had some to run three times the life of the conventional picker, and we have had some to run only a short time.

Mill B: The life of the plastic loop picker varies too much for us to give an answer. We have tried every kind that has been mentioned to us, and they ran anywhere from one day to seven months. Several of the brands have looked promising, but the big problem has been keeping them on the stick properly.

Mill C: We do not have much to say on the plastic loop pickers, but the drop box picker is very satisfactory with us. The life compared to conventional pickers is about five-to-one longer life on plastic pickers, also saving on picker sticks.

Mill D: Our results with sample pickers did not warrant further use. The drop box picker gives about double the life of the conventional picker and then can be rebushed and run again.

Mill E: Average life of both the plastic loop picker and the drop box picker was four-to-five times the life of the conventional picker.

Question No. 5—What type cleaner do you use when cleaning loom at warp-out? Please give the name of the product used and the method of application.

Mill A: We use a loom cleaner made by Phoenix Oil Co. We put it on with a mop from a bucket. By the time we get it over the loom, we start blowing it off with compressed air.

Mill B: On looms that are under a loom blower, we spray the loom with a loom conditioner made by the Sun Ray Oil Co. On other looms we clean at warp out but do not use a cleaner.

Mill C: We use mineral spirits to clean looms at warp out. We first blow all loose lint from the loom. Then we take a bottle of mineral spirits and spray it on the loom using compressed air. Finally, we blow the loom off again to remove the lint left by the cleaner.

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Skeptical Toward Metallic Card Clothing?

IF SO, YOU'LL BE INTERESTED IN THIS REPORT FROM 9 MEMBERS OF THE A.T.O.E. WHO OPERATE 1,500 CARDS

THE pros and cons of metallic card clothing have been sounded time and again down through the years. Some swear by it, others at it. Of late, though, there are unquestionably more of the former than of the latter.

How come?

There are probably many reasons. An important one has been the significant improvement in the quality of metallic clothing. Another has been the perfecting of improved techniques for installing it, and for using it correctly once it is installed.

Not the least of the reasons has been the growing number of favorable reports from mills now using metallic. The following comments from nine mills in Alabama are typical of these reports. The information was compiled by the Alabama Textile Operating Executives for its Fall meeting November 12 at Auburn. The mills represented in the report are operating a total of 1,500 cards on metallic. The smallest installation consists of 61 cards; the largest, 280.

Mill No. 1

We have 101 cards equipped with Hollingsworth metallic card clothing. We make 57-grain sliver out of one-inch strict low middling cotton. We have been putting metallic clothing on our cards for the past five years as the old clothing needed replacement. However, a few of our cards have been clothed with metallic wire of other makes for as long as ten years.

We clothe both doffers and cylinders with metallic and replace journals as needed. We did not re-work journals. Other work on cards has included bolting down the feed rolls to prevent thick places in the lap from damaging the clothing.

With metallic clothing we strip our cards once a week. We mop each card every shift and clean it out thoroughly once a week. Each card is set every three months. We do not grind cylinders or doffers unless the card is making bad work. In grinding, we use a grinding rock in the conventional manner.

The only serious maintenance problem we have found is when the web runs over the doffer and pushes the bottom front plate into the cylinder, damaging the cylinder clothing.

As far as quality is concerned, with metallic wire sliver uniformity is decidedly better. Our nep count has been reduced by 50% with metallic wire. There is no noticeable difference in the amount of trash left in the sliver between metallic and conventional clothing. We have noted very little reduction in flat strips in changing from knee-type wire to metallic. There is no noticeable difference in card fly waste. The waste reduction at the card was reflected in heavier finished yarn weights.

We have not increased production but will have reduced our labor force by two grinders and three strippers when the metallic wire installation is completed. We have reduced our production cost by 0.00110 cents per pound.

Mill No. 2

We have 153 cards clothed with Hollingsworth #27 and #35 metallic clothing. We make 76-grain sliver for our warp and 55-grain sliver for our filling from one-inch staple strict low middling bright cotton. The metallic clothing has been in the installation process for 15 years.

Metallic wire is used on both doffers and cylinders. Worn journals are replaced or re-worked using the Hollingsworth method. We are bolting down feed rolls for protection of the cylinder wire.

Metallic cards are stripped each eight hours. Backs are cleaned and waste taken up once every 24 hours. Fronts are cleaned and waste taken up once every 48 hours. Cards are mopped every day. Fronts are wiped every two hours.

As far as setting is concerned, flats are set every three months. Backs are set twice a year. We aren't on any grinding schedule yet because the new type metallic clothed cards have not been ground in 1½ years of operation. Our older metallic cards have different grinding schedules ranging from 15 days to six months.

We have had considerable trouble with jerk-ins in the laps. This problem has led us to bolt down the feed rolls. We also have problems with fly blowing out and chokes.

Quality-wise, we have improved our sliver uniformity with metallic clothing. In addition, the metallic clothing gives a lower nep count than conventional wire.

We find that since the metallic installation, trash in sliver has changed very little. The amount of card strips is about the same with metallic as with knee-type wire. However, the amount of card fly waste has increased since metallic clothing has been installed.

Card production has increased 2½% with metallic clothing, and we have reduced labor including one grinder, one tender, and part of a stripper's job. We decline to comment on cost reduction.

Mill No. 3

We have 61 cards equipped with metallic clothing. Our cylinders have #35 clothing and doffers have #29. All clothing was supplied by Hollingsworth. We make 57-grain card sliver from $1\frac{1}{16}$-inch bright middling cotton. We began installing metallic wire in September 1959.

We put metallic wire on both doffers and cylinders. We replaced worn journals—none were re-worked. To prevent damage to cylinder wire, feed rolls were bolted down.

With metallic wire our cards are stripped once a week. We blow out screens every 8-10 days, fronts twice a week, backs every shift, and mop cards every shift.

Our cards are set on a eight-to-ten day cycle. Flats are set on the first cycle. Backs are set on the second cycle. We have not determined the method or frequency of grinding.

A major maintenance problem with us has been chokes in screens and wall of doffer. We blow out these places with compressed air on each card setting cycle.

From the quality point of view, with metallic clothing we have improved our long term sliver weight variation and have decreased neps. The amount of trash left in the sliver has increased with metallic wire. Flat strips have decreased by about one-third. Card fly waste has increased. The general waste reduction at the card has been reflected in heavier yarn weights.

The increase in production, labor savings and cost reduction resulting from the change to metallic clothing has not been determined as yet.

Mill No. 4

Ashworth #8 and #9 and Hollingsworth metallic clothing has been installed on 158 of our cards. We make 68-grain sliver using one-inch strict low middling. Metallic wire is on both cylinder and doffer. Worn journals were reworked by Hollingsworth. Feed rolls are bolted down.

Our cards are stripped once a week. The card clothing schedule we use consists of mopping each shift, wiping backs each shift, fronts three times a week.

We set each card all over every third week. We use a fillet traverse grinder as needed.

Special maintenance problems encountered using metallic wire have included greater wear on bearings, etc., due to added weight and speed.

The card sliver made with metallic clothing is more uniform than conventional wire. Nep count is lower. We find no noticeable difference in trash left in the sliver and no noticeable difference in flat strips. If card waste has been reduced it has not showed up in the yarn weight.

Using metallic wire we have increased our card production from 13.5 to 16.0 pounds per hour. Even with this increase in production we have reduced our labor force by one grinder and three strippers. We are still replacing knee-wire with metallic clothing and do not have cost reduction figures available.

Mill No. 5

We have 245 metallic clothed cards in our mill. On cylinders we use Ashworth #9, 301, HG and Hollingsworth #27 and #35. On doffers we use Ashworth #9 and PA 65, and Hollingsworth #27 and #29. We make 58-grain sliver from one-inch strict low bright.

We began replacing knee-wire with metallic clothing in 1929. We had all metallic clothing by the late 1930's. When the clothing was installed we replaced worn journals. We do not rework journals. Our feed rolls are not bolted down.

We strip our cards once a week. Our cleaning schedule is: mop cards once every 24 hours, wipe fronts five times a shift, clean stripping gears once weekly, clean feed roll clearers once every 24 hours, clean calender roll clearers once every 24 hours, check selvage chokes each shift, and pull chokes every two weeks.

We set our cards completely every three months. Screens are pulled twice a year. No grinding is necessary.

Special maintenance problems encountered have included the difficulty in replacing damaged clothing (as compared to repairing damaged knee-wire clothing). The most frequent causes of damaged wire is stock going over doffer, tail-end

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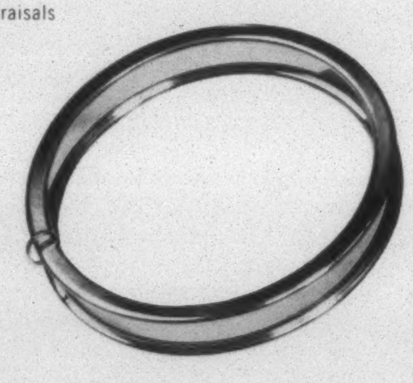

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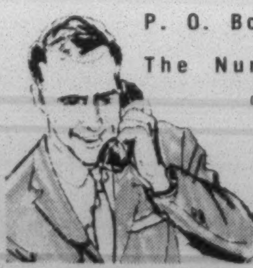

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of lap going through feed roll, foreign object going through, and chokes heating up cylinder causing doffer and cylinder to rub.

On a Saco-Lowell sliver tester we find variation on metallic is 7.35% compared with 9.45% on conventional. Present Uster % C.V. on card sliver is 3.70%. Nep count is about 10% lower with metallic clothing. Flat strips have been reduced by about 30%.

Mill No. 6

We have 268 cards equipped with Hollingsworth fine metallic card clothing. We make 61-grain sliver out of a cotton mix consisting of 70% middling inch, 17% middling inch spot, and 13% one-inch strict low with middling color.

The metallic clothing has been installed on both doffers and cylinders. We did not rework worn journals, but replaced them. Other mechanical changes have included bolting down a limited number of feed rolls on a trial basis.

Every 14 days our cards are brush stripped. Cards are mopped once a shift. Cards get an all-over setting every 64 days. We do not grind metallic cards unless necessary. After 2½ years, we have not encountered any special maintenance problems.

On changing to metallic our sliver uniformity decreased from 4.25% to 2.65%. Neps have decreased approximately 44%. The sliver from metallic clothed cards has slightly more trash left in it. The amount of flat strips produced has been decreased slightly. We do not have more fly and shedding in processes beyond carding. However, we have not noticed our yarn weights running heavier or lighter because of the waste changes in the metallic clothed cards.

Production on the metallic cards is the same as for conventional wire. Two card grinders and three strippers have been cut out on 192 metallic cards. Since our installation is not completed, we cannot give the cost reduction in cents per pound.

Mill No. 7

We have 280 cards clothed with metallic wire whose average age is four years. We started clothing cards with metallic wire in 1952 and completed the installation in 1960.

The stock used to make 62-grain sliver is ⅞ to one-inch middling to strict good ordinary cotton.

A breakdown of the types of wire we use includes: 90 cards clothed with Ashworth 14-teeth wire doffer and cylinders; 141 cards clothed with Hollingsworth 14-teeth wire doffer and cylinders; and 49 cards clothed with Hollingsworth 14-teeth wire doffer and 20-teeth wire cylinder. We prefer Hollingsworth 20-teeth cylinder wire with teeth at 80 degree angle and 14-teeth doffer wire with teeth at 65 degree angle.

During the metallic wire installations we had to replace approximately 18 journals. We have had no experience with reworked journals.

Approximately 50 feed rolls have been bolted down. We plan to complete this work at a later date. Feed rolls were bolted down to prevent chokes and thick tail-ends from going through and damaging metallic wires.

With metallic wire, we brush strip our cards once a week. With knee-wire we vacuum stripped three times a shift and brush stripped once every two weeks. With metallic wire, card tenders wipe fronts of cards once a shift, mop cards once every 24 hours, and blow off cards once each shift.

We set the doffer-to-cylinder, comb-to-doffer, and stripper plate-to-cylinder every 672 hours. We set the flats-to-cylinder, licker-in-to-cylinder, and mote knives-to-licker-in every 1,344 hours. Flats are ground on a schedule of 672 hours with metallic wire as compared with a grinding schedule of 348 hours when we were using knee-wire. We grind cylinders and doffers as needed using a pumice grinding stone.

A special maintenance problem with metallic wire has been replacement of smashed wire. We replace smashed wire with used wire so the tooth height is approximately the same. When we have no used wire, we completely recover the doffer or cylinder with new wire.

The metallic clothed card sliver is more uniform than conventional card sliver. The standard C.V. for knee-wire card sliver was 3.74% while the standard C.V. for metallic is 3.30%. Metallic clothing has given us an approximate 20% reduction in neps.

On the limited testing we have done we have seen no significant difference in trash content in the sliver. Our flat strips have increased by 2.8%. The amount of fly made on processes beyond carding has not changed noticeably. Card pounds per hour is the same with metallic wire as it was with conventional clothing. However, we are getting more pounds through the cards since efficiency is approximately 2% greater.

Labor savings provided by metallic wire include a reduction in card grinders by 31%. We eliminated a vacuum card stripper on each shift although we increased our brush stripping from once every two weeks on knee-wire to once a week on metallic. We reduced our carding cost per pound by 19% through reduction in labor and increase in number of cards per tender.

Mill No. 8

We have had 165 cards equipped with metallic clothing since August. We run 62-grain sliver using inch middling cotton. On doffers we use Hollingsworth #29 wire. On cylinders we use Hollingsworth #35 wire. Worn journals were replaced, not reworked, where needed.

We have bolted down our feed rolls but this is not a consequence of installing metallic clothing.

We brush strip our cards once a week. Backs are cleaned out every 12 hours. Fronts are cleaned out once a week. Flat strips are taken down every four hours.

Each card is set completely every 27.5 operating days. We do not grind metallic wire unless it has been damaged. Flats are ground once every 18 operating days.

Quality-wise we have reduced sliver unevenness by 5% with metallic wire. We have seen a slight increase in the amount of fly in processes beyond carding.

Mill No. 9

By the end of the year we will have 108 cards equipped with metallic clothing. At the time of this report we had 90 cards with metallic wire. The metallic installation program was started at our plant in March 1957. The type wire used is: cylinder — Hollingsworth #35; doffer — Hollingsworth #29.

We use 1⅛-inch middling cotton and make 59-grain card sliver.

Our cylinders and doffers are being clothed with metallic wire at Hollingsworth's shop. Journals are reworked. If a journal is beyond repair, a new one is installed. We are bolting down our feed rolls to prevent damage to metallic clothing from thick tail-ends of laps.

Stripping is performed on a ten-day cycle. Chokes are pulled every ten days. Cards are blown out completely every

90 days. We set fronts and flats every 90 days. Backs and screens are set every 180 days.

We grind our metallic cards only when they get dull. We grind on the first shift only and only with the foreman's okay. We haven't had any major maintenance problems with metallic clothing.

Metallic clothed card sliver is 25% more uniform than conventional sliver. Neps have been reduced by 50%. We have noticed no effect on the amount of trash left in sliver since changing to metallic wire. We have had some reduction in the amount of flat strips produced.

Our metallic clothed cards produce the same number of pounds per hour as when clothed with knee-wire. We have achieved a net reduction of one card tender per shift with metallic wire. The card tenders previously had to vacuum strip conventionally clothed cards. Some of the card tender's duties went to the grinder. Our carding cost has been reduced 0.23 cents a pound since going to metallic clothing.

A Look At Woolen And Worsted Statistics

CONSUMPTION DOWN 4% IN THE FIRST EIGHT MONTHS; PRODUCTION DOWN 2% IN THE FIRST SIX MONTHS

IN a statistical look at woolen and worsted activities for the first eight months of 1960, the Wool Bureau reports a 4% drop in total consumption from figures of a year ago. Some 278.2 million pounds (scoured basis) were reported for the January-August 1960 period as compared with 290 million pounds for the same period in 1959.

Consumer expenditures for non-durable goods and services held up fairly well during the first half-year against a decline in demand for durable goods of all kinds. Consumer clothing expenditures for seven months of 1960 were 4% ahead of the corresponding year-ago rate—7% ahead for men's and boys' clothing and 2% ahead for women's and children's clothing. The consumer apparel price index rose by less than 2% between July 1959 and July 1960. At the end of July, department store stock-sales ratios were on the high side of past July ratios in most clothing and sportswear departments, except men's clothing.

The January-August production of men's suits increased 7% compared with a year ago and of slacks, 13%, while sweater shipments increased 2%. Declines were sustained in the production of two items: 7% in coats and 2% in sport coats. By contrast, declines of 5% and 9% respectively, occurred in the production of women's coats and suits and of 3% in sweater shipments. There were offsetting gains of 9% in skirt production and 4% in dress production.

Interim statistics are inadequate for appraising wool's 1960 competitive position in the clothing market. A 25% increase in men's Summer weight suits made of wool fabrics enabled wool to retain its corresponding 1959 share of this market. But a gain of 6% in slacks made of wool fabrics was insufficient to maintain wool's 1959 share of the slacks market, and it lost one percentage point. There is evidence from the men's suit and slacks industries that production of 100% wool trousers with permanent creases is expanding. This coincides with a revival of trade interest in 100% wool tropical worsteds for Spring 1961 and the combination of these developments may give wool a promotional support from the trade such as it has not had for some time in the Spring season for men's wear.

January-August mill consumption of apparel wool was off 4% from a year ago, reflecting a shade more weakness in the worsted system than in the woolen system. The revival of interest in 100% wool tropical worsteds for Spring 1961 is expected to improve the worsted picture before the end of the year. On the other hand, the synthetic-wool blends may give 100% wool fabrics stiffer competition in Fall-Winter lines as man-made fiber producers push harder than ever to find markets for their expanding capacity.

During the first half of the year, the production of civilian wool apparel fabrics was 2% below that of a year ago, including a 9% decline in men's wear fabrics and a 3% rise in women's wear fabrics. A new Census Bureau report revealed that production of 100% wool content fabrics during the first half of 1960 accounted for 56% of the total yardage in selected weight and construction classes of wool apparel fabrics, wholly or chiefly wool, by weight. Over 80% of 9 to 13-ounce men's wear worsteds were 100% wool, but only 44% of woolen constructions in these weights. In women's wear woolen constructions, 100% wool content fabrics accounted for slightly over one-half of the total.

The output of domestic mills was supplemented by close to 45 million square yards of imported wool apparel fabrics (equivalent to 29 million linear yards), representing an increase of 31% over the corresponding 1959 rate of imports. When imports are added to production, the total supply of wool apparel fabrics available to cutters during the first six months of 1960 actually exceeded that of a year ago by 2%. By August, imports of wool fabrics totaled almost 50 million square yards. Italy maintained its new leadership in the import market followed, in order, by Japan and the United Kingdom.

The production of nonapparel fabrics declined severely as the demand for transportation upholstery took a nosedive. The shift from large cars to compact models is likely to reduce not only the potential yardage of upholstery fabrics, but also the demand for quality fabrics. Blanketing continued to lose ground, but there is evidence of a resumption of retail promotional support for wool in an effort to resuscitate quality and prestige lines in this badly demoralized market.

The outlook for consumption of apparel wool over the next six months depends to a large extent on consumer confidence in the near-term business outlook. This will be expressed in the trend of retail clothing sales which influences the volume of retail orders for new stocks. It was pointed out earlier that trade reports of current retail clothing business have a phlegmatic tone, but national statistics often discredit the views advanced by individual businessmen. It still remains to be seen whether or not clothing expenditures during the entire Fall season will hold up to first half-year rates.

How To Make Sure You're Getting The Most From Your Carding And Drawing Can Sizes

ARE you sure you're getting the most out of your carding and drawing can sizes?

You can't really know the answer to this question unless you know you have the right number of coils of sliver per layer in the can and all deliveries have the same number of coils per layer. An equally, or more important, fact is that you must have the coiler head and the can table properly lined and leveled.

Because more coils per layer are generally known to mean more pounds of stock in the can (more coils—less air space), the standardization of coiler heads throughout a card room is necessary for best efficiency. The doffing cycle is pegged to the cans which fill up the fastest. More stock in the cans means longer card doffing cycles and a more efficient drawing operation. Over the years machinery makers have built coilers making 18, 20, 25, 30 and 33 coils per layer (and probably others).

Suppose your cards had some coilers making 25 coils per layer and others making 33. Your 33 coil cans would not actually be ready to doff when the 25 coil cans would be full. If your doffing cycle was pegged to the capacity of the 25 coil cans your cards would not be as efficient as possible. If the doff cycle was pegged to the 33 coil cans, the stock in the 25 coil cans would bloom and spill over on the floor while waiting to be put in the drawing creels.

It works the same way on drawing. In an actual mill test run, it was found a delivery of drawing with 25 coils per layer in a 12x36-inch can would hold 10.0 pounds of stock. The coiler head and can table was correctly lined and leveled. A 12-tooth gear on the upright shaft was changed to nine teeth causing the coiler head to lay in 33 coils per revolution. As a result the can held 10.9 pounds of stock. No other changes were made. The frame had previously doffed each 19.0 minutes. After the increase in coils per layer the frame doffed each 20.5 minutes.

The 1.5 minute gain in drawing doffing cycle was not the only advantage gained by increasing the coils per layer. This drawing was fed to roving creels which ran 9.0 hours with 25 coil cans. With 33 coil cans the creels ran 9.7 hours. Drawing and roving frame efficiency was increased without sacrificing anything and at only the small cost of an ordinary spur gear which can be made in practically any mill machine shop.

A drive to get bigger packages has been put forth in the textile industry for the past few years. Before a mill can decide that it needs enlarged packages it must be sure it is getting the most from present sizes. Here's how you can find out if you're getting the most out of your equipment.

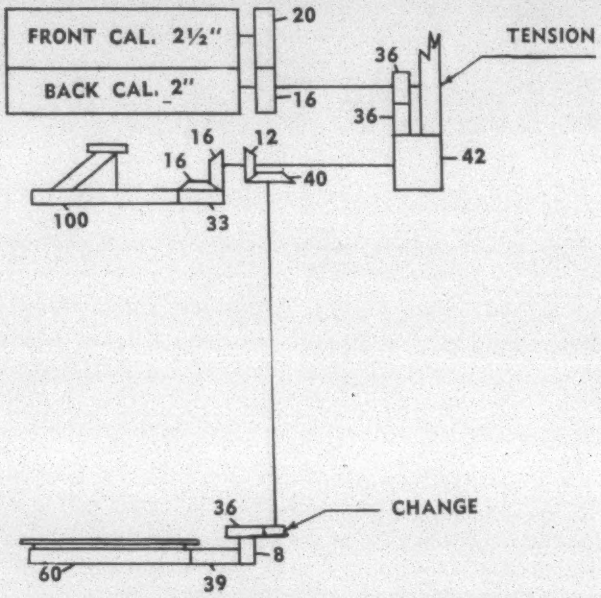

Fig. 1—Calculations for coils per layer.

Coils per layer calculations are shown for the gearing arrangement in Fig. 1.

Coils Per Layer

For 12 tooth gear (marked "Change" in Fig. 1)

$$\frac{60}{8} \times \frac{36}{12} \times \frac{40}{12} \times \frac{16}{16} \times \frac{33}{100} = 25 \text{ coils per layer}$$

For 9 tooth gear (marked "Change" in Fig. 1)

$$\frac{60}{8} \times \frac{36}{9} \times \frac{40}{12} \times \frac{16}{16} \times \frac{33}{100} = 33 \text{ coils per layer}$$

Line And Level Coilers

Card and drawing cans can't be filled to normal capacity unless the coiler head and the can table are properly lined and leveled. This can be easily done with a plumb line. The plumb line is dropped through the trumpet and the can table moved into correct position. A spirit level is used to get the coiler and can table level. Usually a few shingles driven under appropriate places is enough to do the job.

There is certainly nothing new about these ideas. People have been lining and leveling card cans for a long, long time. Yet, if small percentages of your filled card cans are blooming and spilling sliver on the floor while waiting to be creeled behind drawing or if the cans behind your roving frames are not running out evenly, it will pay you to do some checking.

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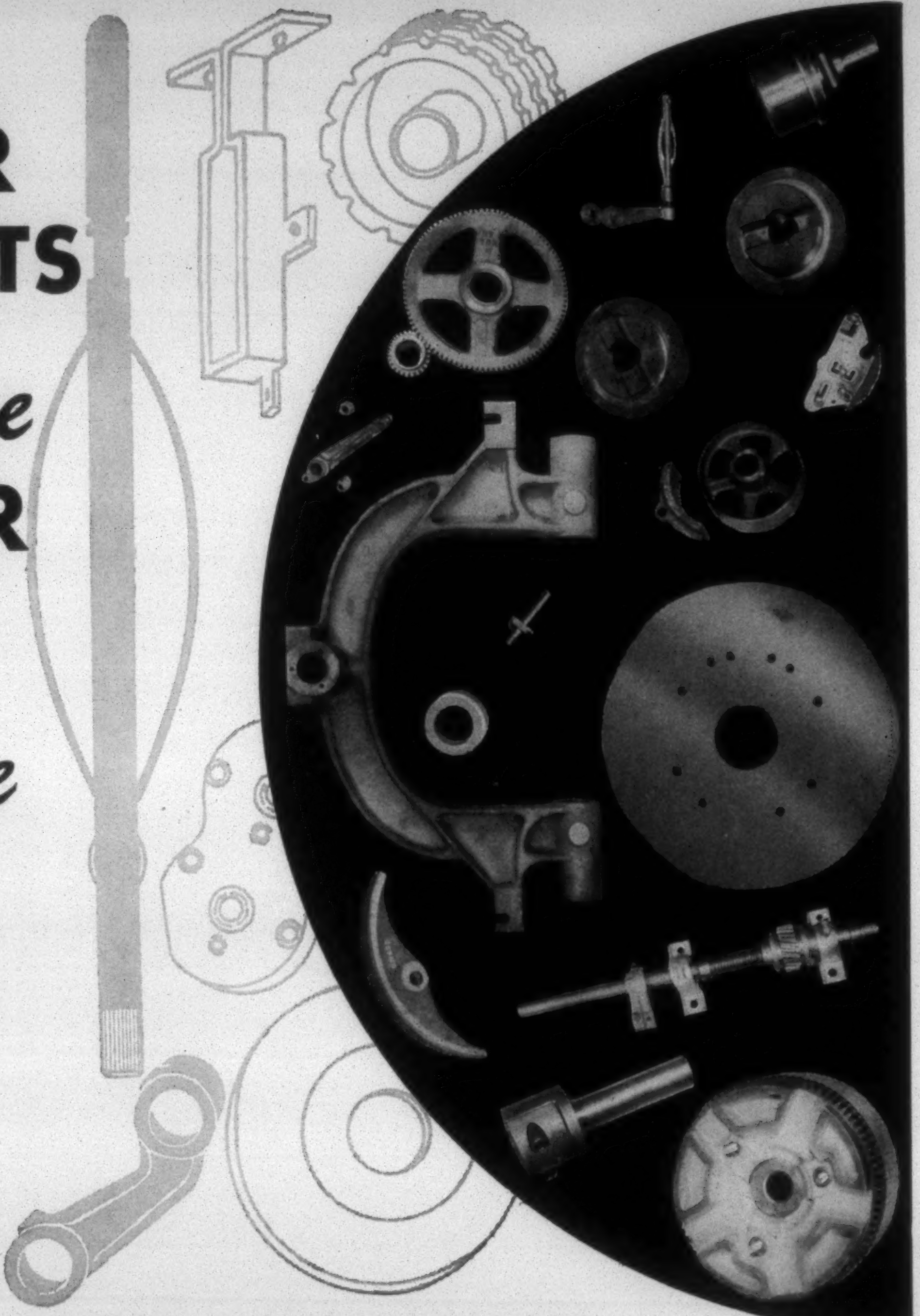

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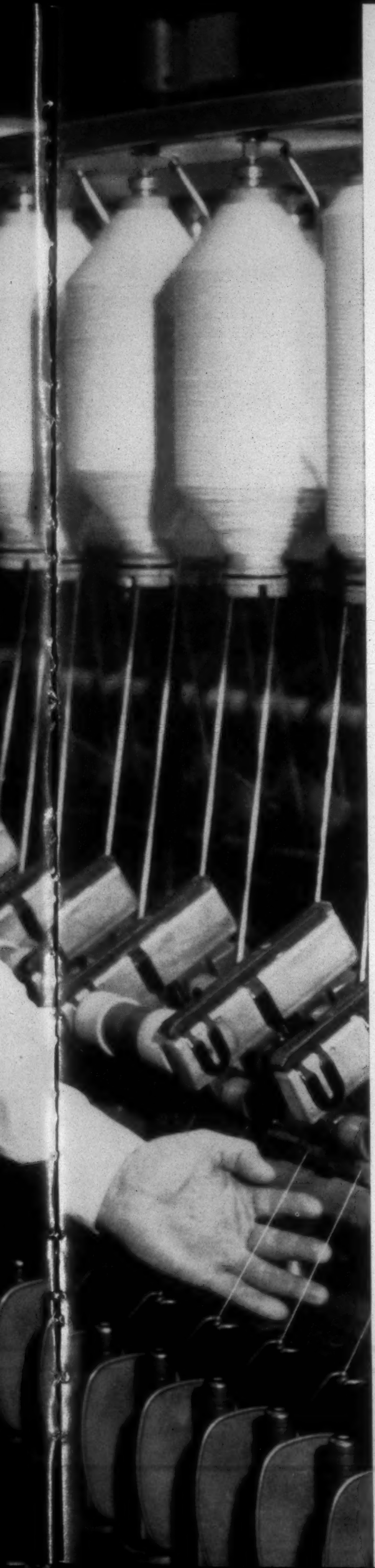

Mr. A. M. Federline, Overseer
of Spinning at Startex Mills, Startex, S. C.,
discusses yarn quality with
Armstrong representative Paul Rosser.

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The Loomfixer And His Job **Part Twenty-Four**

SETTING THE MIDGET FEELER IS FAIRLY SIMPLE IF A FEW RULES ARE LEARNED AND FOLLOWED

By WILMER WESTBROOK

SOME loomfixers never learn to correctly set the midget filling feeler. They will move the feeler case forward, back and sideways, bend the feeler and the connecting rod, tap the feeler case with a hammer, and move the cam follower trip. By such trial-and-error methods they usually get the feeler to perform until some misaligned part breaks or wears out.

When it is correctly set and timed the midget feeler will operate efficiently for months without adjustment. Too often faults are attributed to the feeler when it is blameless. There are many things other than the feeler that will prevent change of filling or that will cause a partly used bobbin to be ejected.

Setting the feeler is fairly simple if a few rules are learned and followed. First, remove all play and lost motion from the crank arms and the rocker shaft. With an empty bobbin in the shuttle, seat the shuttle in the left hand box.

With a straight edge, align the outer edge of the feeler case with the second ring of the bobbin in the shuttle.

Pull the lay forward until the tip of the feeler touches the bobbin in the shuttle. Adjust the height of the feeler so that the feeler tip is slightly above the center of the bobbin.

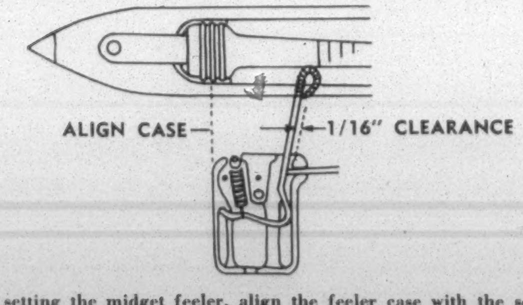
Move the lay forward until it is $\frac{5}{16}$-inch from front center and adjust the feeler case until there is $\frac{1}{16}$-inch clearance between the feeler and the side of the slot in the feeler case. See that the feeler slides freely on the empty bobbin.

Adjust the length of the connecting rod to give a clearance of $\frac{3}{32}$-inch between the end of the rod and the feeler.

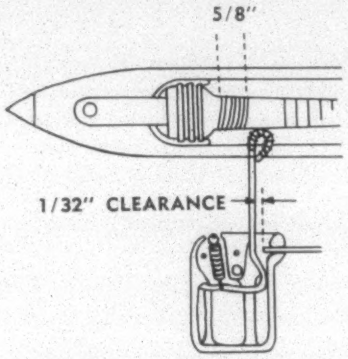
Pull the lay to front center position, which will place the cam follower on the low point of the cam, and adjust the cam follower trip so that its lowest point will be $\frac{1}{8}$-inch above the lifting lever and $\frac{1}{8}$-inch back of it.

For man-made fibers, set the feeler with the lay $\frac{1}{16}$-inch from front center and do not have any play between the feeler and the side of the slot in the case nor any clearance between the feeler and the connecting rod with the feeler in normal position.

If the filling changing mechanism fails to operate, check all the feeler settings. If the settings are true and none of the parts are badly worn, check the following:

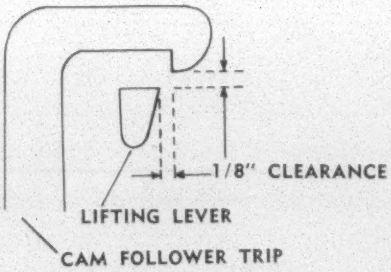


In setting the midget feeler, align the feeler case with the second ring of the bobbin in the shuttle and have 1/16-inch clearance between the feeler and the side of the slot, the lay in front center position.



Have enough yarn in the bunch for about six picks. Avoid having the bunch so wide that the feeler cannot be set correctly.

(1) See if the shuttle is boxing correctly and is not bouncing or creeping forward. (2) Check for play in the crank arms. (3) Lift upward on the end of the lay to see if the rocker shaft or its bearings are worn. (4) With the loom running, place your fingers on the sword and the rocker shaft to see if the sword is loose. (5) Check for end play in the lay. (6) See if the picker is loose, worn, or not parallel with the lay end. (7) Check the shuttle feeler and bunter. (8) Check the battery and other parts of the filling changing mechanism. (9) Look for rough or worn bobbins.



Set the cam follower trip so that the lifting lever is 1/8-inch below its lowest point and 1/8-inch back of it in its normal position.

If the loom ejects full, or partly exhausted bobbins, check for: (1) erratic behavior of the shuttle; (2) picker too high or too low; (3) shuttle spring loose or worn; (4) excessive vibration of the loom; (5) play in crank arms or rocker shaft; (6) back box plates, lay end, or shuttle race out of line; and (7) harness out of time or not set correctly.

It is important to have good bunches of filling on the bobbin for efficient operation of the filling feeler. There should be enough filling on the bunch for at least three round trips of the shuttle, or six picks. For most fabrics about six to eight yards of yarn in the bunch is sufficient. The bunch should not be more than $\frac{5}{8}$-inch wide. The feeler can be set for a wider

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bunch but to get a full sweep the feeler will sometimes hang on the first groove of the bobbin if it is set too far from the butt.

Don't bend the feeler. It is made in the best shape for efficient operation. Move the feeler case to get correct adjustment. If the case is worn enough to affect the settings, replace it.

Use a feeler spring with correct tension. These springs come in several weights. A weak spring will not control the feeler and a spring that has too much tension will cause unnecessary wear of parts and will damage the filling yarn.

Sometimes a loomfixer will bend a new loop in the end of a broken spring and use it instead of getting a new one. Such practice has the same effect as putting in a stronger spring and should be avoided except in emergencies.

Feelers can be obtained with a variety of tips. Select the tip best suited for the type of filling yarn. The feeler can be equipped with an adjusting screw for cop filling. This adjusting screw can also be used for any filling when uniform bunches cannot be obtained. It will cause a filling transfer when enough yarn has been used from the bobbin to let the head of the screw touch the shuttle.

Don't overlubricate the feeler. Put a drop of oil on the feeler at the edge of the case at warp-out. Remove the feeler case cover periodically and clean lint and dirt from the case. Swab the inside of the feeler case and the case cover with an oil-saturated cloth before reassembling it.

Rogers Named President Of Carolina Yarn Association

Rogers

James Y. Rogers Jr. of John L. Stickley Co., Charlotte, N. C., was named president of the Carolina Yarn Association at that group's recent meeting held in Lexington, N. C. Other officers are: E. Waring Best, Celanese Corp., Charlotte, vice-president; Paul Thompson, the Du Pont Co., Charlotte, secretary; L. B. Allen, Comer-Avondale Co., Charlotte, treasurer; and Frank P. Barrie, Leesona Corp., Charlotte, executive secretary. The group has announced that its Spring outing will be held at Pinehurst, N. C., May 10-13.

First-Half Tufted Textile Shipments Up Over Those For Last Half Of '59

Total shipments of tufted textile products in the first half of 1960 amounted to $250 million as compared with $233 million in the last half of 1959 and $215 million during the first half of 1959, according to figures published by the Bureau of the Census.

The value of manufacturers' shipments of tufted carpets and rugs amounted to $220 million during the first half of 1960. Of this total, $185 million represented shipments of rugs and carpeting larger than 4x6 feet, while shipments of rugs 4x6 feet or smaller amounted to $35 million.

In the first half of 1960, manufacturers shipped 7.8 million bedspreads valued at $28 million. This represents a decrease from the previous half year's total of 8.7 million spreads at $33 million, but an increase over the total of 6.9 million spreads valued at $25 million shipped in the first half of 1959.

Tufted robe shipments in the first half of this year amounted to 327 thousand valued at $0.9 million.

Roger Milliken Plays Host To Textile Deans

THE textile executive of tomorrow will have to be more of an engineer and less of a personnel relations expert than his present day counterpart. He will have to run plants that will be far more complex and increasingly automated. He will have to be highly trained, and he will have to be available in increasing numbers if the industry is going to meet future competition both foreign and domestic.

These are some of the long range views Roger Milliken shared with members of the National Council for Textile Education as he played host to the group October 23-25 at Deering Milliken's Peach Queen Guest House in Spartanburg, S. C.

The textile school representatives were also among the first to be shown the blueprints of the completely automated cotton spinning mill being planned by Deering Milliken. The plant is expected to be a prevue version of the mill of tomorrow, and as such offered the educators their best tangible look yet at a proposed proving ground for future textile school graduates.

Members of the council were also given the opportunity to see what the modern mill of today is doing in the way of research and development as they were conducted on a full afternoon's tour of the extensive facilities of Deering Milliken Research Corp. and Service Corp. Staff members of both functions described Deering Milliken organization, objectives, techniques and college-graduate recruiting and training activities. At a dinner meeting some 30 plant managers and executives of Deering Milliken described their responsibilities and engaged in an informal discussion with members of the council, pinpointing some of the aspects of textile education that need stressing.

In the council's executive sessions, discussions centered around new programs in effect at the schools represented, in which basic technology and science are being stressed as opposed to the traditional "how-to-do-it" curricula and courses offered in the past. The improved programs were cited as one of the factors in the current increase in textile school enrollments. Some 1,900 full-time students are now studying at the dozen schools represented in the council.

The group also accepted preliminary plans for a four-day seminar for textile school faculty members to be held next June at the Philadelphia Textile Institute.

Officers of the council include Prof. Ray Flege, Texas Tech, president; Dr. James Taylor, Georgia Tech, vice-president; Dr. Stanley Backer, M.I.T., secretary; and President L. H. Hance, I.T.T., treasurer.

Representatives of the country's nine textile colleges attending the recent annual meeting of the National Council for Textile Education at Spartanburg, S. C., included *(front row, left to right)* Russell B. Newton, president, Deering Milliken Research Corp.; Dean Malcolm Campbell, N. C. State College; Prof. Ray Flege, Texas Tech; Roger Milliken, president, Deering Milliken Co.; Dr. James Taylor, Georgia Tech; Dr. Stanley Backer, Massachusetts Institute of Technology; Kenneth M. Lowry, general manager, Deering Milliken Service Corp.; *(back row, left to right)*: K. J. Scarlett, director placement department, Deering Milliken Service Corp.; Dr. Bertrand W. Hayward, Philadelphia Textile Institute; William Harris, Institute of Textile Technology; Dr. John F. Dillon, Textile Research Institute; Prof. Cleveland L. Adams, Auburn University; L. K. Fitzgerald, Deering Milliken Service Corp.; Dr. Martin J. Lydon, Lowell Technological Institute; Dean Gaston Gage, Clemson College; Dr. L. H. Hance, Institute of Textile Technology; Harry Riemer, Henry Bach Associates Inc.; Dr. Hugh M. Brown, consultant, Clemson, S. C.; Dmitry Gagarine, vice-president, Deering Milliken Research Corp.; and Bruce W. Stroup, assistant director, placement department, Deering Milliken Service Corp.

The Designing Of Pile Fabrics

By E. B. BERRY

VELVETEEN, A SMOOTH FILLING PILE FABRIC, FINDS APPLICATION IN A WIDE VARIETY OF APPAREL USES

Chapter 13

Velveteen

CALLAWAY Textile Dictionary defines velveteen as: "A filling pile fabric constructed similarly to corduroy but having a surface uniformly covered with a short, full, cut pile. Commonly made wholly of cotton but sometimes of rayon. The picks-per-inch range from around 175 to over 600, with about 80 ends per inch. The filling yarn is soft spun, and in better qualities is of combed long staple cotton, which when cut gives a soft, smooth, velvety pile. The pile may be waxed in finishing to improve the luster. Usually piece dyed but sometimes printed."

Velveteens and velvets are very often confused. Velvet is a warp pile fabric while velveteen is a filling pile fabric. The pile picks in velveteen are cut in the manner similar to corduroy. Fig. 98 illustrates the weave, drawing-in draft and cross-section of a velveteen. This cross-section is the appearance of the fabric as it is woven.

In the cross-section, the dark threads are the pile picks, and are seen to float over several ends. Pick 2 is under end 1, floats over ends 2 through 4 (or 3 ends); then goes under end 5 and floats over ends 6 through 8 (or 3 ends). Pick 3 floats over ends one and two, under end 3, over ends 4 through 6 (or 3 ends) under end 7 and over end 8. The floating in this case is always over 3 ends.

The white threads are the ground picks, and weave plain with the cross-hatched threads which are the ground ends. Both ground picks and pile picks are thrown from the same shuttle, which makes possible the use of a Draper loom, and a drop box loom is not necessary.

One distinguishing feature of velveteen is its uniformly cut pile surface. The cords or wales of corduroy are not seen here, but rather a solid surface of cut pile resembling velvet. In order to obtain this over-all coverage, the pile picks interlace with the ground ends at intervals which are spread out, rather than concentrating the interlacings on the same ground ends as was done in corduroy.

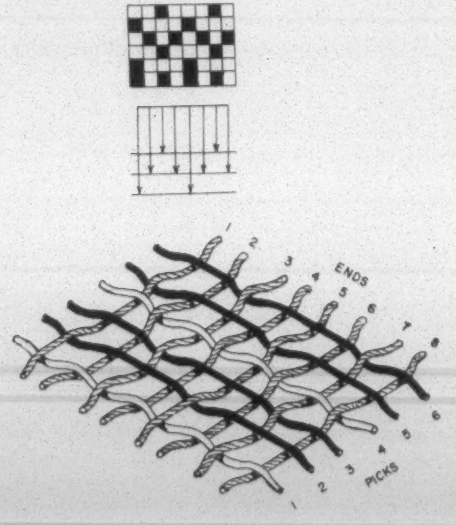

Fig. 98

After this fabric comes from the loom, the pile picks are cut in the same manner as the pile picks in corduroy are cut.

The cloth as seen in the cross-section of Fig. 98 will be cut twice. The first time through, pile picks 2 and 5 will be cut over ends 3 and 7. On the second trip through the cutting machine, pile picks 3 and 6 will be cut, over ends 1 and 5. These tufts from picks 2 and 5 will be bound on different ends from the tufts from picks 3 and 6. The entire surface will have cut pile.

There is no one weave for a velveteen fabric, but rather velveteen is a class of cloth with different weaves and constructions. The following are some typical velveteen fabrics:

Width	Ends x Picks	Warp Yarn	Filling Yarn
23″	88x244	30/1	40/1
40″	72x500	80/2	50/1
39″	66x212	60/2	36/1
23½″	72x260	60/2	30/1

All these pickages are high, in fact velveteen has the highest pickage of any woven fabric.

There are no rounded effects in velveteen as known in corduroy. In velveteen the entire surface is to have a smooth and uniformly cut pile.

Variations

Fig. 98 forms a "V" tuft. In order to secure better pile anchorage than is provided by the V tuft formed by Fig. 98, a "W" tuft may be employed. Fig. 99 shows the weave for such a W tuft.

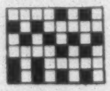

Fig. 99

Another means of varying the fabric is to change the ratio of pile picks to ground picks. So far the weaves have been 2 pile picks to 1 ground pick. This ratio may be 3 to 1 as seen in Fig. 100 or 4 to 1 as seen in Fig. 101. The cloth from Fig. 100 will be cut 3 times, while the cloth from Fig. 101 will be cut 4 times. These are V tufts. Fig. 102 has a plain

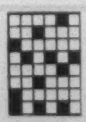

Fig. 100

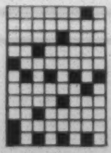

Fig. 101

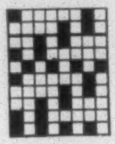
Fig. 102

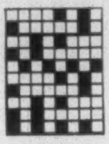
Fig. 103

weave ground with a ratio of 4 pile picks to 1 ground pick and makes a W tuft. Fig. 103 is the same as 102 except the pile weave is staggered.

Another variation is in the weave of the ground picks with the ground ends. When the picks per inch become very high, the ground weave must be opened up to allow for more filling diameter. The ground weave may be a 2-1 twill as seen in Figs. 104 and 105, or a 2-2 twill as seen in Fig. 106.

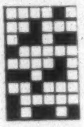
Fig. 104

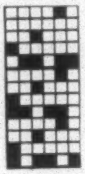
Fig. 105

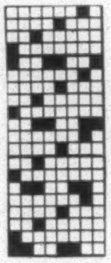
Fig. 106

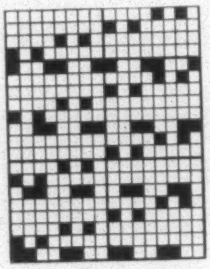
Fig. 107

Fig. 107 shows the weave for a velveteen that has a ratio of 4 pile picks to one ground pick. The ground weave is a 2-2 twill. This makes a W tuft. Another weave is shown in Fig. 108. The motif for the pile picks is a 4 harness crowfoot weave. Fig. 109 has a 5 harness satin for the motif for the pile picks.

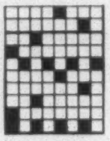
Fig. 108

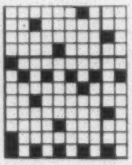
Fig. 109

Finishing

A typical velveteen flow chart is as follows: weave; measure; greige inspect; cut; singe; inspect; scour or boil out; bleach or dye; extract and dry; brush and wax; inspect; color match; roll and wrap; and ship.

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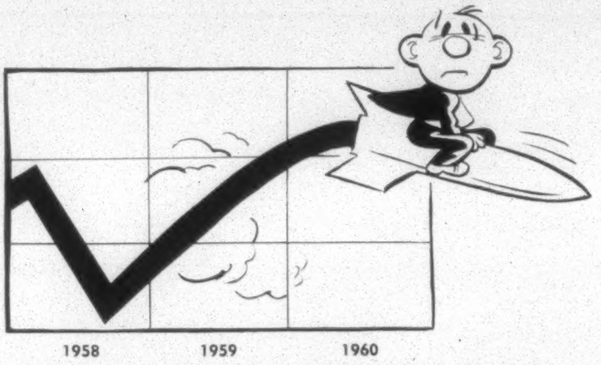
The Economic Health Of The Textile Industry

A NORTHERN TEXTILE ASSOCIATION REPORT DISCUSSES THE INDUSTRY'S SHARE IN LAST YEAR'S RECOVERY

How does the economic health of the U. S. textile industry compare with the over-all U. S. economy? Is its share of the consumer dollar increasing, or dwindling? How genuine is the industry's complaint concerning the effect of foreign imports on the domestic market?

Answers to these and other equally important questions are contained in an economic report compiled by the research department of the Northern Textile Association for presentation at the association's 106th annual meeting recently in Portsmouth, N. H. The report covers data for the year 1959, plus as deep a look at 1960 as available additional data would permit. It brings into sharp focus both encouraging and discouraging aspects of the industry's current role in the nation's economy.



Signs of the weakening of the economy's expansion are becoming more numerous.

THE U. S. economy was perched on top of an all-time high peak at the end of 1959, having risen from the depths of the nation's severest postwar recession in the Spring of 1958.

Gross National Product at year end stood at $482 billion;

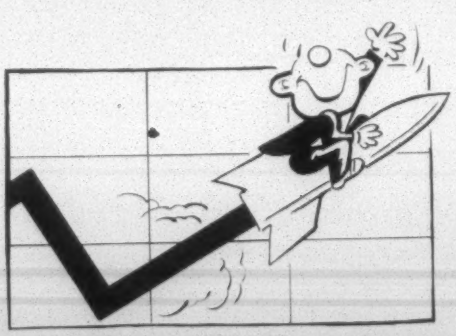
Personal Consumption Expenditures were at a level of $314 billion;

Government Expenditures were nearing the $100 billion mark;

Gross Private Domestic Investment surged to a level of $72 billion.

Disposable Personal Income rose to $337 billion.

Other economic indicators reflecting the rebound of the country's business community were Non-Agricultural employment which reached an all-time high of 59.7 million people; the index of Industrial Production, breaking all previous records, rising to 105 of its 1957 base despite the protracted steel strike; Business Sales at a record $60 billion; and Inventories at a near record $90 billion.



Optimism ran so high toward the end of 1959 that economists were labelling the coming decade "the soaring 60's."

Prices of industrial and consumer goods mirrored these events by topping all previous levels. Adding impetus to such economic activity was the boom in consumer credit. Optimism ran so high toward the end of 1959 that Government and other economists were predicting that the next decade would be the most prosperous era by far in our nation's history and labelled it "the soaring 60s."

What About The Weaknesses?

Despite this high level of economic activity, unemployment in 1959 averaged 5.5% of the total civilian labor force. Chronic labor surplus areas were given little, if any, lift by these booming conditions. For example, in New England, the Springfield, Holyoke, Lawrence, Lowell, Providence, Pawtucket, New Bedford and Fall River areas are still classified as areas of substantial labor surplus.

But the most striking weakness in the economy last year was an all-time low in the figure of net exports of goods and services. It dropped to minus one billion dollars. So great was the concern caused by the outflow of gold resulting from this deficit that the Administration initiated an intensive drive to increase the export flow of American goods.

The sheer momentum of the economy's drive has carried it to still further highs in the first half of 1960. As of June of this year, Gross National Product reached and passed the magic one-half trillion dollar mark. However, this period of expansion is in its 29th month, quite old by any standard. Signs of its weakening are becoming more numerous all the time. The steel industry is operating at 50% of its capacity. Orders for manufactured goods have been running below deliveries since the start of 1960 producing a reduction in backlogs; inventory accumulation not

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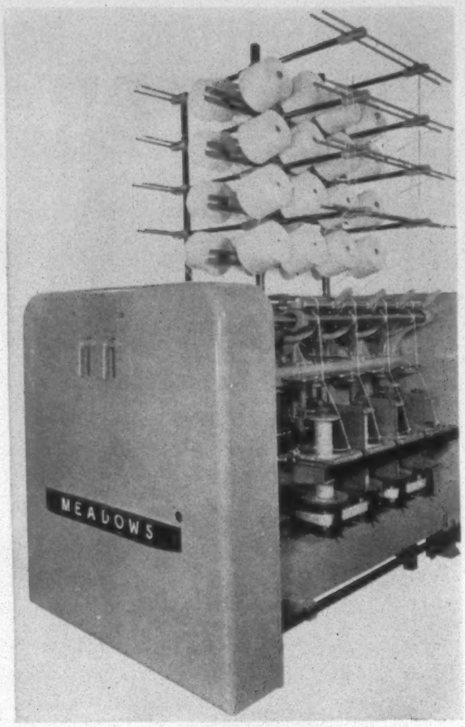

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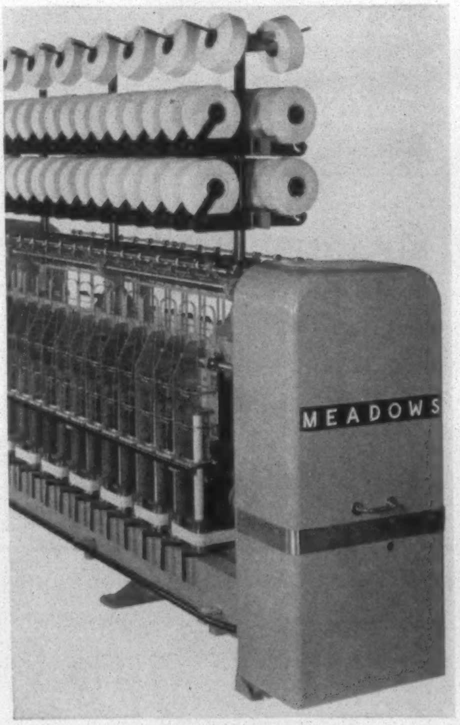

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only has leveled off but in the last two months there has been liquidation of inventories; automobile production has not kept up its expected pace; and activity of other durable goods, notably appliances, is in a depressed state. Public and private construction have not as yet recovered from the downward drift which started in the Fall of 1959. Two critical economic indicators which anticipate general business activity, paperboard production and machine tool orders, have been trending down in recent months.

The Domestic Textile Industry

The year 1959 has been recorded as one of recovery in the U. S. textile industry coinciding with the rise of the nation's economy from the depths of its 1958 recession. In that year 12.4 billion linear yards of cloth were produced by the broadwoven fabric segment of the industry, an increase of 6% over 1958.

The upturn has carried into 1960 with fabric production in the first quarter totaling 3,188 million linear yards, 3% more than the 3,086 million produced in the first quarter of 1959.

Other economic indicators reflected the favorable position maintained by the textile industry in 1959. Profits on sales of 3% and on stockholders' equity of 7% were the highest since 1953. Mill consumption of the three major fibers was at a high level, spindle and loom activities increased from 1958, while new plant and equipment expenditures in 1959 totaled $412 million or 40% more than the 1958 total. New plant and equipment expenditures are expected to reach $600 million in 1960.

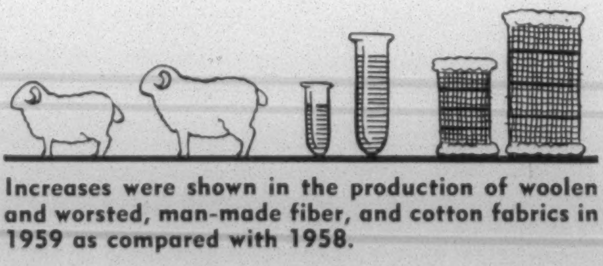
Some 966,000 people were employed in the textile industry in 1959, and production workers in U. S. textile mills received higher earnings than they did for any previous year, with textile industry average hourly earnings in 1959 at $1.57, 4% more than the 1958 figure. As of June 1960, textile average hourly earnings were $1.63.

Cotton Production Up 7%

The broadwoven fabric segment of the cotton industry during 1959 produced nine and one-half billion linear yards of goods accounting for 77% of total fabric production. This was 7% more than was produced in 1958 but about the same as produced in 1957. First quarter 1960 production of 2.5 billion linear yards was slightly ahead of a comparable period in 1959.

New England fine cotton fabric production was slightly ahead of 1958. First quarter 1960 production was slightly ahead of that for the same period last year.

At the end of the 1960 crop year, cotton system spindles in place numbered 20 million, a postwar low, down slightly from the 1959 total of 20.3 million while active spindles remained at 19.2 million during the same period. Some 91.1% of active spindles were on 100% cotton in the 1960



Increases were shown in the production of woolen and worsted, man-made fiber, and cotton fabrics in 1959 as compared with 1958.

crop year compared to 91.3% in the previous year. Spindle hours totaled 118 million in the 1960 crop year, about the same as the 1959 figure. Cotton spindle activity based on a 144-hour week was 77.3% in the 1959 year compared to 81.5% in June of 1960.

Hours operated on cotton broadwoven goods (average hours per loom per week) in 1959 averaged 122.1, a postwar high, compared to 114.6 in 1958. In June, the average was 125.7 hours

Other indicators reflected the relatively good position of the cotton fabric industry. The index of cotton broadwoven inventories was 153 in 1959. This compared to 231 in 1958 and 173 as of June 1960. Unfilled orders in terms of the number of weeks of production were 14.8 in 1959 compared to 9.8 in 1958, and 13.3 in June of 1960. The ratio of inventories to unfilled orders was 25% in 1959 down from 60% in 1958 and was 30% as of June 1960. The cotton cloth price index rose to 89.3 in 1959 compared to 85 in 1958. The 1960 index has been consistently over 90.

Per capita mill consumption of cotton rose to 24.7 pounds in 1959 from the postwar low of 22.5 pounds in 1958. Cotton and synthetic fabric mill production workers in 1959 earned an average of $1.52 an hour and worked an average of 40.9 hours per week. These compared to 1958 figures of $1.43 and 38.5, respectively. The rise in earnings reflected the general wage increases of 7-10 cents an hour in the Spring of 1959. Further increases of approximately 7 cents an hour were granted in the Spring of 1960 on a more limited basis. June 1960 figures indicate that cotton and synthetic workers in the U. S. earned an average of $1.60 per hour.

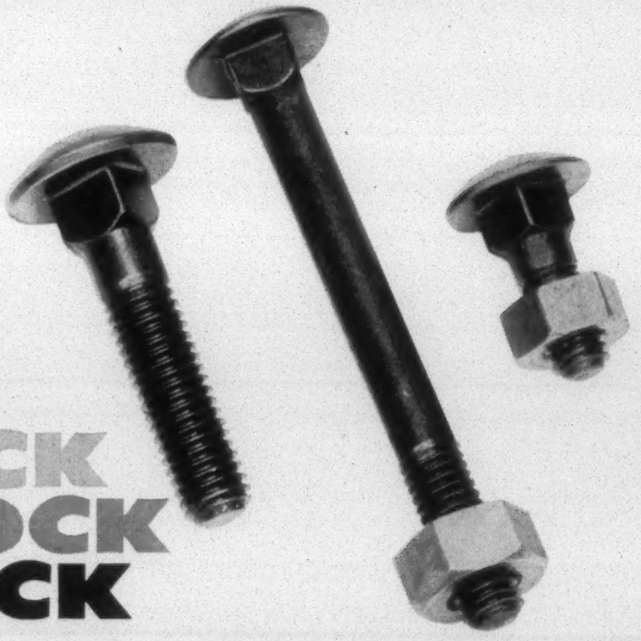
U. S. cotton farmers harvested an estimated 14½ million bales for the 1960 crop year, slightly below the previous year's crop but 760,000 bales greater than the 1948-1959 average. Yield per acre was estimated at 450 pounds per acre compared to a ten-year average of 345 pounds per acre. In the extra long staple category, the over-all production was 68,000 bales with a yield per acre of 542 pounds per acre in 1959. The import quota for this cotton remained unchanged from last year's level at 39 million pounds. Cotton consumption in the 1958-59 crop year was 8.7 million bales while for the recently ended crop year, consumption slightly exceeded nine million bales. The price of middling one-inch American upland cotton declined from 34.74 cents in the 1958-59 year to 32.92 cents in the crop year just ended.

The average mill margin for 1959-60 of 32.85 cents was 29% above the average figure for the previous crop year.

Exports of raw cotton in the 1959-60 crop year totaled over 7 million bales, 150% more than the previous crop year. Exports continued to enjoy a government subsidy which has fluctuated between 6½ and 8 cents a pound.

Woolen Production Up 15%

In 1959, the domestic woolen and worsted industry recovered from one of the worst slumps in its history when production increased 15%. Some 311 million linear yards were produced compared to the 270 million produced in 1958. However, it was considerably lower than the 1956 total of 324 million linear yards. The recovery was confined to the apparel sector of the industry where men's and boys' fabric production rose by 22% and women's and children's



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by 11% from 1958 to 1959. In the non-apparel sector output of blanketing fell by 14%. As of the first quarter of 1960, production of 73 million linear yards was slightly ahead of that for the first quarter of 1959.

Woolen and worsted apparel fabric production in New England totaled 140 million linear yards, 18% more than the 119 million produced in 1958. First quarter 1960 production of 34 million linear yards was 6% more than the same 1959 figure.

At the end of 1959, woolen and worsted looms in place numbered 13,526 compared to 13,521 in 1958. The number of active looms averaged 9,000 at the end of 1959 so that the ratio of active to in place looms was 67%. The number of loom hours operated in 1959 totaled 59 million, up 10% from 1958.

Fiber consumption on the woolen and worsted system totaled 574 million pounds in 1959, 17% more than in 1958 with 35% consisting of apparel class raw wool. In the first seven months of 1960, consumption was 10% below consumption for the same 1959 period. Per capita mill consumption of wool increased from 1.9 pounds, a postwar low, in 1958 to 2.4 pounds in 1959.

The wool cloth wholesale price index dropped from 104.4 in 1950 to 103.4 in 1959 although the index for all wool products advanced slightly during this period. So far in 1960 this index has maintained a level just over 105.

Woolen and worsted mill production workers in 1959 earned an average of $1.67 an hour and averaged 42.4 hours work per week. The 1958 figures were $1.60 and 40.7, respectively. June 1960 figures indicate that woolen and worsted production workers in the U. S. earned $1.75 per hour in that month.

U. S. production of shorn wool, clean basis, for the 1960 crop year is estimated at 119.4 million pounds, 3% higher than the 115.7 million pounds in 1959 and the highest total since 1946. U. S. imports of unmanufactured wools, clean basis, for the calendar year 1959 totaled 292 million pounds, 54% more than 1958 and the highest figure since 1953. Of this quantity, 68 million pounds were carpet wools and 100 million pounds were dutiable.

Table 1

U. S. Cotton Goods Imports January-June 1960

(Square Yards)

	Japan	Hong Kong	Total All Countries
Cotton cloth*	45,513,908	41,456,767	257,844,139
Made-Up Goods[1]	11,988,358	4,197,824	26,354,230
Apparel[1]	48,714,290	94,127,437	157,960,425
Total	106,216,556	139,782,028	442,158,794
Cotton Yarn[1]	0	0	38,292,503
Knitgoods[1]	7,569,243	7,388,044	18,132,474
Misc. Cotton Mfrs.[1]	31,024,872	821,113	92,642,820
Total	38,594,115	8,209,157	149,067,797
Total, All-Cotton Goods Imports	144,810,671	147,991,185	591,227,191
Annual Rate, All-Cotton Goods Imports	289,621,342	295,982,370	1,182,454,382

*Includes Velveteens, Ginghams, Other Cotton Fabrics.

[1] Converted to square yards by means of conversion factors used by the Business and Defense Services Administration, U. S. Department of Commerce.

Sources: U. S. Department of Commerce, Bureau of the Census Report FT-130; Textiles and Clothing Division, B.D.S.A.

U. S. production of top increased from 118 million pounds in 1958, a postwar low, to 143 million in 1959. So far in 1960 top production is 5% below that of a comparable 1959 period.

Man-Made Fiber Fabrics

Man-made fiber fabric production in the U. S. totaled 2.4 million linear yards in 1959 compared to 2.3 million in 1958 and it was the highest total since 1955. Rayon and acetate fabric production declined slightly to 1.6 million in 1959 and is the second lowest postwar figure. Production of non-cellulosic fiber fabric, on the other hand, increased from 694 million in 1958 to 846 million in 1959, an all-time high. As of the first quarter of 1960 production totaled 625 million, up slightly from the same 1959 period.

Man-made fiber fabric production in New England in 1959 was down slightly from the 1958 total. First quarter 1960 production was 7% more than the first quarter 1959 quantity.

At the end of 1959 looms in place in man-made fiber fabric mills totaled 96,352 compared to 97,344 at the end of 1958. Loom hours operated in 1959 totaled 545 million compared to 517 million in 1958. The number of active looms averaged 87,000 at the end of 1959 so that the ratio of active to in place looms for that year was 90%.

Consumption of man-made fiber staple totaled 481,000 bales for the 12 months ending July 1960, while the previous 12 months' total was 510,000. Per capita mill consumption of man-made fiber increased from nine pounds in 1958 to 10.5 pounds in 1959.

Man-made fiber production in the U. S. rose to an all-time high of 1.8 billion pounds compared to a 1958 total of 1.5 billion pounds.

Over-All Trends

The over-all upturn in domestic textile activity reflects the expansion phase of a two-year cycle, a phenomenon which the industry has experienced for many years. There are signs that the expansion period is over and contraction in the industry has begun. Profit rates on sales have turned down from the high fourth quarter 1959 rates, consumption of fiber in certain categories is spotty, the ratio of cotton broadwoven inventories to unfilled orders has been climbing steadily since the beginning of the year, and mills are cutting back on production schedules.

The cyclical swings which are characteristic of the textile industry's structure were aggravated by the continuation of trends in important series during the past year. Despite a population growth of 37% during the postwar era, textile production has remained virtually the same from 1947 to the present. Per capita mill consumption of all fibers has declined 17% during this period, and personal consumption expenditures on clothing items as a per cent of total personal consumption expenditures has likewise showed a steady decrease from 9.4 in 1947 to 7.3 in 1959. Over-all textile employment in 1959 did not even reach the recession level of 1958. It is also interesting to note that the linear yard output per man-hour dropped slightly in 1959, the first time this measure has declined since 1948. Prices of textile products as reflected by the Bureau of Labor Statistics' wholesale price indexes of such goods continued to be depressed throughout 1959.

Foreign Trade

Imports

The manifold and complicated domestic problems which continued to hamper the industry in 1959 were completely overshadowed by a flood of low priced imports during 1959 and an even more rapid flow so far this year. Cotton goods imports are now entering at the rate of 1.2 billion square yards. Woolen and worsted cloth imports may reach 60 million square yards for all of 1960. The country is feeling the impact of a rapidly increasing growth in man-made fiber fabric imports.

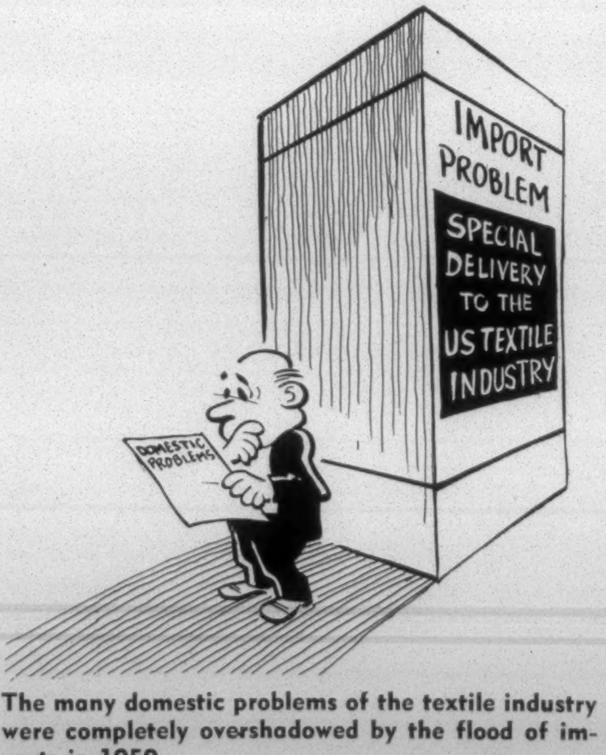
Cotton Goods

U. S. imports of all-cotton textile products totaled the equivalent of 591 million square yards in the first six months of 1960, an annual rate of 1.2 billion square yards. This annual rate is 65% more than the 705 million square yards imported in all of 1959 and 160% more than the 1958 total.

Hong Kong goods accounted for 148 million square yards or one-fourth of this six-month total. This is an annual rate of 296 million square yards or 65% more than 1959 total imports from Hong Kong, which has overtaken and replaced Japan as the single biggest source of U. S. cotton goods imports in less than four years.

The most spectacular increases in volume have been in cotton cloth (exclusive of made-up goods and apparel) imports which totaled 297 million square yards in the first seven months of 1960.

This is: (a) an annual rate of over ½ billion square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yards of cloth alone; (b) 200% more than the first seven months 1959 total; and (c) more than all cotton cloth imports for the seven-year period, 1947-1953.

As of the first seven months of 1960, imports of Japanese cotton fabric of 52 million square yards still lead the rest of the world, but Hong Kong with 51 million square yards compared to nine million in the first half of 1959 and India with 35 million compared to four million in 1959 are strongly challenging her position.

Other countries from every part of the world are joining with these far Eastern countries to flood the U. S. market. Imports from Spain, Egypt, Portugal and France, almost negligible in the first seven months of 1959, have exceeded 100 million square yards in the first seven months of 1960. Imports from Pakistan, Formosa and Korea continue to enter the U. S. in rapidly increasing amounts.

Signs of still another huge cotton cloth supplier to this country is indicated by imports from Brazil. Last year, imports from that country were negligible. They are now coming in at the rate of three and one-half million square yards.

This awesome flood of cotton cloth imports has been heightened by an increased rate of imports of "other cotton manufactures." In the first six months of 1960, these imports were at an annual rate of 667 million square yards, or 47% more than total 1959 imports of 454 million square yards.

Cotton yarn imports in square yard equivalent are entering the U. S. at a rate of 66 million square yards, or 11 times the total imported in all of 1959.

Imports of apparel made from woven cloth rose to 266 million square yards in 1959, 65% more than the 1958 total. Even this high rate has been exceeded in the first six months of 1960 with imports for the year conservatively estimated at an overwhelming 320 million square yards.

Knitgoods imports which rose from 19 million square yards in 1958 to 25 million square yards in 1959 are coming in at the rate of 36 million or a further increase of 47%.

Table 2
U. S. Imports of Wool Textiles
(Square Yards)

	Jan.-June 1959	Jan.-June 1960	% Change
Woolen and Worsted Fabric	33,364,000	43,707,000	+ 31%
Tapestry, Upholstery and Pile Fabric	73,000	157,000	+115
Blankets, Robes and Steamer Rugs[1]	86,000	58,000	— 33
Woven Wearing Apparel[2]	1,513,000	2,549,000	+ 68
Total	35,036,000	46,471,000	+ 33%
Knitgoods, including Knit Fabric[2]	3,279,000	4,755,000	+ 45
Woolen and Worsted Yarn[2]	5,128,000	5,869,000	+ 14
Total	8,407,000	10,624,000	+ 26%
Total, All-Wool Goods Imports	43,443,000	57,095,000	+ 31%

[1] Conversion Factor: one pound = 1.3 square yards
[2] Conversion Factor: one pound = 2 square yards
Source: U. S. Department of Commerce, Bureau of the Census.

Imports of miscellaneous cotton manufactures, totaling 93 million square yards in the first six months of 1960, are 25% more than all such goods imported in 1958. This is a rate of 186 million square yards or 75% more than the massive 1959 total.

Woolens And Worsteds

Woolen and worsted fabric imports in the first seven months of 1960 amounted to 46.4 million square yards, 26% higher than the same period in 1959.

Imports in the first seven months of 1959 accounted for 79% of total imports. If this ratio is maintained in 1960, imports this year will exceed 58 million square yards of cloth.

Italy has become an even more important factor this year in the race for the American wool cloth market. In the first seven months of 1959, imports from that country were 12.5 million square yards, 34% of total U. S. imports, while this year Italian imports so far total 18.5 million, or 40% of total imports.

Japan has also increased her share of U. S. imports from 25% in the first seven months of 1959 to 28% in the first half of 1960. The increase in total imports from the 1959 to 1960 periods is wholly accounted for by those two countries.

The increases in U. S. imports of "other wool manufactures" as of the first six months of 1960, such as tapestry, upholstery and pile fabric, and knit and woven wearing apparel, more than kept pace with the increase in woven fabrics. Imports of goods made from woven fabric increased over 70% from the 1959 to 1960 periods.

Man-Made Fiber Textiles

In the first two or three months of 1960, man-made fabric imports lagged behind those of the first part of 1959. However, with a tremendous spurt of 1.5 million pounds in June of 1960, an all-time monthly high, imports for the first seven months of this year exceeded slightly those of the seven-month 1959 total of 5,860,000 pounds.

Japan continues to increase her share of U. S. imports of these goods. In the first half of 1959, she accounted for 68% of total imports and this year she has accounted for 72%.

Although the current rate of imports of synthetic woven fabric are just beginning to surpass the 1959 rate, 2,200,000 pounds of woven wearing apparel goods entered the U. S. in the first seven months of 1960, 30% more than the first seven months total of 1959.

Exports

Despite the upturn in business activity in 1959 and the intensive export program pursued by the Administration in 1960, exports of cotton and man-made fiber piece goods edged downward in the first six months of 1960.

Cotton Piece Goods

Exports of cotton piece goods in the first half of 1960 totaled 233 million square yards compared to 237 million square yards in the first half of 1959 and 272 million in the first half of 1958. In the first six months of this year, exports to Australia were nine million square yards compared to 600,000 in the same 1959 period. Exports to the United Kingdom jumped from 100,000 to 4.6 million square yards. However, exports to Cuba fell from 24 million to three million square yards, and those to Venezuela dropped from 10 to 6 million after having a total of 28 million more exported to that country in the first half of 1958. The biggest single drop from the 1959 to 1960 periods were exports to Canada, from 121 million to 114 million square yards.

Concerning type of fabric, the most noticeable change from the first half of 1959 to the first half of 1960 was a drop of almost 30 million yards of unfinished cheesecloth and gauze.

Man-Made Fiber Piece Goods

Exports of man-made fiber piece goods in the first six months of 1960 were 80 million square yards compared to 82 million for a like period in 1959 and 84 million in 1958. These goods, like cottons, were shipped in increased quantities especially to the United Kingdom and Australia with the former receiving eight million in the first half of 1960 compared to 269,000 in a like period last year, while for the latter it was 2.8 million for the 1960 period and 138,000 square yards in the 1959 period. The single biggest loss concerned exports to Switzerland, which fell from five to 2.6 million square yards.

Exports of white, piece dyed, yarn dyed spun yarn fabrics lost the most ground falling from 22 to 16 million square yards.

Wool Piece Goods

Wool fabric exports in the first six months of 1960 totaled 383,000 square yards compared to 713,000 square yards in all of 1959 and 853,000 in 1958.

World Capacities And Consumption

While the U. S. textile industry has experienced hardship from loss of exports and increased imports, the textile industries of other countries continue to build even greater capacity.

Whereas world mill consumption of cotton has increased almost 43% from 1950 to 1959, U. S. consumption has actually declined 5%. From 1947 to 1959, world consumption of wool has increased approximately 30% while U. S. mill consumption of apparel wool has dwindled by 65%. World synthetic fiber consumption has shown a rate of growth two and one-half times as great as that of the U. S. from 1950 to 1959.

This world textile resurgence has been characterized by increased world per capita consumption of textile fiber rising from 8.64 pounds in 1950 to 10.54 in 1959, or 22%.

(Continued on next page)

Warm Western Welcome Greets A.C.M.I. Board

THE recent five-day tour of Western cotton producing areas by the American Cotton Manufacturers Institute's board of directors has been termed "revealing, rewarding and inspiring" by A.C.M.I. President J. M. Cheatham.

The board held its Fall meeting on Monday, October 24, in Fresno, Calif., and then for the balance of the week toured cotton research, producing, ginning and handling facilities in California's San Joaquin Valley and in the Salt River Valley near Phoenix, Ariz.

Two resolutions were passed by the board at its Fresno meeting. The first directed the attention of government authorities to the fact that there already exists a surplus of textile manufacturing capacity in the world and urged that any enlarged foreign aid to South America and Africa be directed away from textile manufacturing.

The second reaffirmed the belief of the institute that "As a matter of equity, at least half of the textiles purchased with International Co-Operation Administration funds should be procured from domestic sources." Present I.C.A. textile procurement from domestic sources runs 8% to 12%.

The board also approved a comprehensive industry-wide, nation-wide public relations program along two fronts: a public education program on the modern textile industry and a concentrated public information program in support of the textile stand on the imports issue.

The program calls for intensified employee communications, an accelerated national publicity effort, a survey of public attitudes toward the industry, a basic industry film, a film on the imports problem, a dramatized lecture-demonstration for local audiences, institutional advertising on imports and a teaching-aid materials program for local schools. Specific projects will be implemented over the next several years.

Clark, Ruffin, Hall, Wilson, Cheatham

A welcome to Phoenix is extended to A.C.M.I. officials by Dan Clark, president of the Arizona Cotton Growers Association. Included in the group are William H. Ruffin of Erwin Mills, A.C.M.I. second vice-president; R. Dave Hall of Climax Spinning Co., A.C.M.I. first vice-president; J. Clyde Wilson, board chairman, Arizona Cotton Growers Association; and J. M. Cheatham, A.C.M.I. president, holding a key to the city presented by Phoenix Mayor Samuel Martian Jr.

Although a number of textile manufacturing leaders have visited Western cotton producing areas during the past 10 to 15 years, the board's extensive tour marked the first official visit by the A.C.M.I. to the West.

The touring group covered some 600 miles in its trip by bus through the San Joaquin Valley and by air to Phoenix.

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While the U. S. textile industry has experienced loss of exports and increased imports, the textile industries of other countries continue to build even greater capacity.

This compares to a 13% drop in U. S. per capita consumption of all fibers.

While U. S. per capita consumption of wool fiber has declined from 4.2 pounds in 1950 to 2.4 pounds in 1959, a drop of 43%, the world figure actually increased 4%.

World per capita consumption of cotton increased 18% from 1950 to 1959 and U. S. per capita consumption of this fiber declined 20% during this same period.

Although man-made fiber per capita consumption in the U. S. increased from 9.1 to 10.5, or 15%, during the period under consideration, the world figure increased 50%.

Sams Named To Head Georgia Textile Education Foundation

Hansford Sams Jr., assistant president of Scottdale (Ga.) Mills, was elected president of the Textile Education Foundation Inc., at that group's recent annual meeting held at the W. Harrison Hightower Auditorium on the Georgia Tech campus. Sams had previously served the foundation as a director and treasurer. A 1936 graduate of Georgia Tech, he succeeds R. Houston Jewell, vice-president of Crystal Springs Bleachery, Chicamauga.

Re-elected to their posts were: J. M. Cheatham, president Dundee Mills Inc., Griffin, Ga., vice-president; T. M. Forbes, vice-president; and Frank L. Carter, secretary.

James A. Byars, manager of the Eagle & Phenix Division of Reeves Bros. Inc., was named treasurer. New directors elected to three-year terms are: L. G. Hardman Jr., president of Harmony Grove Mills, Commerce; Howard R. Hart, manager, Brighton Division, Burlington Industries, Shannon; Paul K. McKenney Jr., vice-president, Swift Mfg. Co., Columbus; A. J. Strickland III, vice-president, Strickland Cotton Mills, Valdosta; and Robert Train, president of Bibb Mfg. Co., Macon.

The foundation was founded by Georgia textile leaders to aid in the development of facilities for higher education of young men preparing for careers in the industry. It purchases machinery and provides faculty salary supplements for Georgia Tech.

Lawrence R. Brumby, vice-president of Bibb Mfg. Co., Macon, received Georgia Tech's "Service Award" at the foundation's meeting. Brumby, as chairman of the machinery and equipment committee, has supervised the purchase of $500,000 worth of manufacturing and laboratory facilities for the A. French Textile School.

The "Outstanding Instructor" award went to Charles Broadwell, personnel director at Bibb Mfg. Co., Columbus, for his work in teaching "Supervision and Human Relations."

Cotton Consumption In September Up As Compared With August

Total consumption of cotton in the U. S. in September was 801,445 running bales as compared with 684,519 bales in August and 862,830 bales in September of 1959. The U. S. daily average consumption during September was 32,058 bales as compared with 25,353 bales in August and 34,513 bales in September of last year.

Some 8,524 bales of foreign cotton were consumed in September as compared with 7,697 bales in August and 9,400 bales in September 1959. Man-made fiber consumption totalled 39.1 million pounds as compared with 38 million pounds in August and 47.5 million pounds in September of 1959.

Cotton system spindles in place at the end of September totalled 19.9 million, approximately the same as August but down from the 20.3 million in place in September of last year. The spindles were operated a total of 11.2 billion hours in September as compared with 9.4 billion in August and 11.9 billion in September 1959.

Tire Cord And Fabric Production Down In The Third Quarter

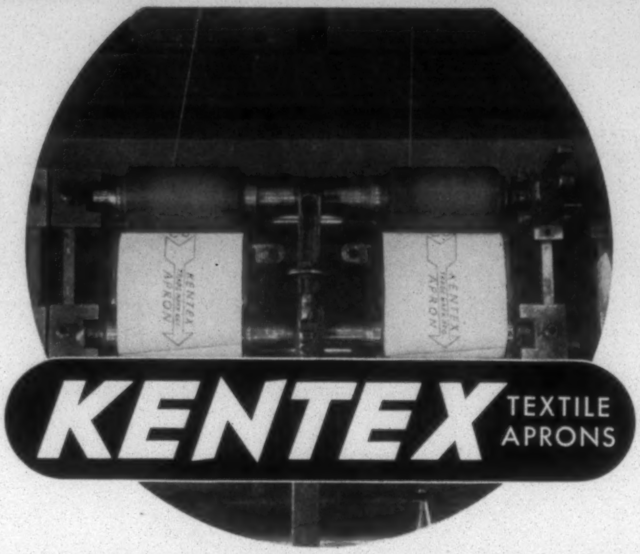
A 20% decrease in the production of tire cord and tire fabric during the third quarter has been reported by the Bureau of the Census. Some 93,077 thousand pounds were produced in the three months as compared with 116,926 thousand pounds in the previous quarter. The third quarter total was 22% below the third quarter 1959 total of 119,302 thousand pounds.

The output of rayon tire cord and tire cord fabric decreased 20% from the previous quarter's level to 51,830 thousand pounds. During the same period, the production of nylon tire cord and tire cord fabric decreased 20% to 32,900 thousand pounds.

Stocks of tire cord and tire cord fabric on October 1 were 45,306 thousand pounds, or 8% below the July 2 level and 8% less than the stocks on October 3.

Production of Tire Cord and Tire Fabric
(Thousands of pounds)

Tyfpe of goods	Looms Operating Oct. 1, 1960	Production July-Sept. 1960	April-June 1960	July-Sept. 1959
Tire cord and tire fabrics, all fibers, total	1,734	93,077	116,926	119,302
Man-made fiber tire cord and tire fabrics	1,102	86,678	108,162	109,129
Rayon tire cord and tire cord fabric	389	51,830	64,692	76,671
Nylon tire cord and tire cord fabric	394	32,900	41,219	30,625
Chafer fabrics and all other tire fabrics	319	1,948	2,251	1,833
Cotton tire cord and tire fabrics	632	6,399	8,764	10,173
Tire cord and tire cord fabrics	25	643	900	920
Chafer fabrics and all other tire fabrics	607	5,756	7,864	9,253



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PERSONAL NEWS

Romasco

Robert F. Romasco has been appointed service control manager at the Whitin Machine Works, Whitinsville, Mass. He will be responsible for developing product service policies and procedures, training and assigning service engineers, and the preparation of the technical data books. Romasco went to Whitin in 1948 and was promoted to service manager in 1955, working out of Charlotte, N. C., until now.

Frank B. Stewart has been transferred from the Unity plant in LaGrange, Ga., to the Milstead, Ga., plant in the Callaway Mills Co. organization as the overseer of weaving. Stewart started with the company as warp creeler and has served in various capacities including production manager and assistant overseer. He attended Oglethorpe University in Atlanta, Ga.

Payet

George L. Payet has joined Columbia-Southern Chemical Corp., Pittsburgh, Pa., a subsidiary of Pittsburgh Plate Glass Co., as supervisor of textile research at its Barberton, Ohio, research laboratory. Payet had formerly been employed by J. P. Stevens & Co. He is a graduate of North Carolina State College with a B.S. degree in textile chemistry.

William G. Rogers has been appointed a salesman in the Southern district for the dyes and chemicals division of The Du Pont Co.'s organic chemicals department succeeding M. S. Morrison who has resigned. Rogers, who has been a demonstrator in the district for the past ten years, will represent Du Pont in the Dalton, Ga., area. He joined Du Pont in 1933 as a technician at the company's technical laboratory, Deepwater Point, N. J., where he was engaged in sales service activities in the field of dyes. He continued in this work until 1950 when he was transferred to the Southern district office in Atlanta as a trade demonstrator.

Charles T. Cooper has been named assistant superintendent of the American Thread Co. plant at Tallapoosa, Ga. He was assistant superintendent of the firm's Dalton, Ga., mill. Cooper, who has been with the company for ten years, has held the position of overseer of spinning, trainee in the preparation department, and was in charge of the laboratory, as well as doing special testing for other company mills.

Robert Booth has been appointed director of manufacturing for the Kendall Co., Walpole, Mass. A native of Blackburn, England, he was educated at Blackburn Technical College. Booth began his service with Kendall Co. at the Bauer & Black plant of the Chicago division in 1942.

Zeigler

George E. Zeigler has been named assistant to the director of manufacturing for the textile division of The Kendall Co. with headquarters in Charlotte. Zeigler, a Georgia Tech alumnus, joined Kendall in 1948 and has been purchasing manager of the textile division for the past seven years. Joseph A. Mix, who has been purchasing manager of the company's Seneca, S. C., plant for nearly two years, will succeed Zeigler as purchasing manager. Mix spent 2½ years in the company's Chicago plant before being transferred to Seneca as purchasing manager. The personnel changes will become effective January 1, 1961.

Paul A. Merriam, sales engineer representing Riggs & Lombard Inc. of Lowell, Mass., retired recently after having served the Lowell firm for 25 years. Merriam covered the territory of Rhode Island, Connecticut, and southern Massachusetts. Prior to joining Riggs & Lombard, he was chief engineer at the U. S. Finishing Co.

Hargreaves

John E. Hargreaves has been named president of Scott Testers (Southern) Inc. with offices in Spartanburg, S. C. by Scott Testers Inc., Providence, R. I. Hargreaves joined the firm in 1952, after having served as laboratory technician for J. & P. Coats, Pawtucket, R. I., and Jones, Gardner & Real Inc. of Providence, R. I. He moved to Spartanburg in 1953 to take charge of service and repair operations, and in 1958 added the responsibility of sales. As president, he will continue to supervise sales and service of Scott testing equipment for the textile industry throughout the Southeast. Hargreaves' education included special studies in textiles at both the Rhode Island School of Design and the Massachusetts Institute of Technology. He is an associate member of the American Association of Textile Chemists & Colorists, and an active member of the Textile Quality Control Association.

Pompelio A. Ucci has been promoted to section head of the Acrilan Development Projects in the Chemstrand Corp.'s engineering and development department. Ucci has been with Chemstrand since March 1952 and has served for the past two years as supervisor, Acrilan development. Prior to joining Chemstrand, he worked for nine years as a research chemist with the Celanese Corp. of America.

William M. Schwarze has joined the Turbo Machine Co., Lansdale, Pa., as sales engineer. Most recently he was with Lansdowne Steel & Iron Co. of Morton, Pa.

Chornyei

Ernest J. Chornyei has been elected to the position of president and chief executive officer of the Bradford Dyeing Association U.S.A. He is currently vice-president of the National Association of Finishers of Textile Fabrics and a member of the A.C.M.I.'s Fabric Committee as well. Chornyei is a graduate of the Rhode Island School of Design.

A number of executive changes have been announced by the General Dyestuff Co., a division of General Aniline & Film Corp., New York City. Dr. John C. Lawler has been named director of manufacturing of General Dyestuff. He will maintain headquarters at the company's Rensselaer, N. Y., plant and will be responsible for manufacturing operations carried out at this plant and at the vat color department of the company's Linden, N. J., plant. Until this new appointment, Dr. Lawler was the plant manager at Rensselaer. . . . Dr. Stiles M. Roberts has been appointed technical director of the division. He also will maintain headquarters at Rensselaer and will be charged with the responsibility for the process research and development activities at Renselaer as well as dyestuff research and development activities at the Linden plant. Dr. Roberts was manager, process research and development department, at Rensselaer until this appointment. . . . H. Alison Webb has been named director of marketing, will maintain headquarters in New York City and will be responsible for all sales activities through the General Dyestuff Co. sales organization. Webb was formerly sales manager.

Charles E. Rich has been named plant manager of the Manchester, Ga., mill of Callaway Mills Co. For the last 16 years he has been plant manager of the Milstead, Ga., plant and has been with the company since 1934. Rich is a member of the Textile Operating Executives of Georgia. . . . John D. Harris, retiring plant manager, has held the position since October 1944.

George Brandt Jr. has joined the executive staff of Rock Hill Printing & Finishing Co., Rock Hill, S. C., as an executive assistant. He was previously with Cone Mills Corp. as superintendent of the Proximity Print Works in Greensboro. He had been with that firm since 1946.

Earle S. Ebers has been named group vice-president in charge of the polymer, fiber and chemical operations of the U. S. Rubber Co. Ebers had been vice-president and general manager of the company's Naugatuck chemical division. In his new post, Ebers will be responsible for the operations of the company's textile, plantation and Naugatuck chemical divisions as well as Latex Fiber Industries Inc., a subsidiary. He joined the rubber company in 1937 as a research chemist in its general laboratories. He was elected vice-president of the company and general manager of the chemical division in 1957.

Black

Raymond Black has recently joined Oliver D. Landis Inc., Gastonia, N. C., as sales representative in the states of Alabama and Georgia. Black, a specialist in metallic card clothing, has been associated with the leading card clothing firms for ten years as a card clothier and trouble shooter and has considerable experience in the synthetics, cotton and absorbent cotton fields.

Charles B. Straus, executive vice-president of United Merchants & Manufacturers Inc., and chairman of Seneca Textile Division, will retire effective December 31. In 1946, he was named a vice-president of UM&M. He became chairman of Seneca in 1954 and a director of UM&M the same year. He was named executive vice-president in 1959.

Finn

A new addition to the BULLETIN'S advertising staff is George C. Finn of Greenwich, Conn. From headquarters in Greenwich, he will represent both the BULLETIN and its companion publication for the knitgoods manufacturer, THE KNITTER, in the Metropolitan New York area. He is a graduate of the University of Virginia where during his undergraduate days he was a tackle on the varsity football team. He was formerly merchandising representative in Metropolitan New York for the American Enka Corp. Prior to that he was an account executive with Northwestern Advertising, Rockland, Maine.

L. C. Stearns has been named overseer of carding and spinning at Indian Head Mills, Cordova, Ala. Stearns previously had been assistant superintendent of the Micolas Cotton Mills, Opp, Ala.

Leon Lowenstein, executive chairman of the board of M. Lowenstein & Sons Inc., recently received the tenth annual award of the Textile Section of the New York Board of Trade as the year's outstanding man in the industry at a luncheon at the Hotel Pierre. More than 700 of his associates in the textile field attended the luncheon. J. Spencer Love, chairman of Burlington Industries Inc., and Archie O. Joslin, former president of Lowenstein & Sons Inc., were the principal speakers.

J. L. Channel, vice-president in charge of production, assumed the additional duties of general manager recently of the Opp Cotton Mills Inc. and the Micolas Cotton Mills Inc., Opp, Ala. . . . L. D. Sayers, who relinquished this position, will become technical director and executive assistant. He will be responsible for co-ordinating of the technical phases with production planning. . . . Ray Jeffcoat continues as general superintendent of both Opp and Micolas Mills. . . . Phillip Stanley will be head of the engineering and methods department.

C. E. Anderson has been named plant manager of Monarch Mills' Lockhart, S. C., plant. He was previously manager of Excelsior Mills at Union, S. C. . . . James A. Ferguson, who resigned to accept a position with Deering Milliken Service Corp., was the former plant manager at Lockhart . . . S. J. Craig Jr., will be the new manager of Excelsior Mills.

OBITUARIES

Allen Stanley Bedell, 71, board chairman of J. E. Sirrine & Co., Greenville, S. C., died recently. He served as engineer on various textile plant constructions and became a partner of the firm when the partnership was formed. In 1956, when Sirrine incorporated, he became chairman of the board and of the executive committee. Mr. Bedell retired in 1958.

Gregory Ferenbach, 59, board chairman of Leon-Ferenbach Inc., New York City, died October 30. Mr. Ferenbach was a director of the Pennsylvania Manufacturers Association. Survivors include his widow and two sons.

H. Frank Hunsucker, 80, board chairman of Highland Cotton Mills, High Point, N. C., died in a High Point hospital recently after a long illness. Mr. Hunsucker was one of the company's founders and served as its president for many years. He is survived by his widow, a son and a daughter.

Johnston McCorkle, 63, superintendent and a director of Harmony Grove Mills, Commerce, Ga., died recently after a brief illness. Surviving are his widow, a daughter and a son.

William H. Stonaker, 72, retired chairman of the board of Mill Factors Corp., New York City, died at his home in East Orange, N. J. on November 5. He had been identified with the textile and factoring business for more than 50 years. He joined the firm of A. G. Hyde & Son in 1906, subsequently became its treasurer and remained with the company until 1918. Mr. Stonaker then joined Kugelman, Frankland & Foreman, predecessor of Mill Factors, which was organized in 1919. He became vice-president, and in 1942 was elected president. He held this position until 1954, when he was elected chairman of the board. Surviving is his widow.

George Hay Whigham, 82, chairman of Canadian Celanese Ltd. and former chairman of Celanese Corp. of America and British Celanese Ltd. died recently after a long illness. After an early career in engineering, he entered the man-made fiber industry and was chairman of Celanese Corp. of America from 1923 to 1940. He was appointed director of British Celanese Ltd. in 1927 and named chairman of Canadian Celanese Ltd. in 1928. Mr. Whigham continued as chairman until his death.

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MILL NEWS

CONSTRUCTION. NEW EQUIPMENT. FINANCIAL REPORTS. CHARTERS. AWARDS. VILLAGE ACTIVITY. SALES AND PURCHASES

GREENSBORO, N. C.—For the nine months ended September 30, Cone Mills Corp. reported a consolidated net sales of $148.8 million against $147 million a year ago. Net profit in the period totaled $3.8 million compared with $3.9 million a year ago.

ANDERSON, S. C. — Land clearing has started for the new Clark-Schwebel Fiber Glass Corp. weaving and finishing plant here. The building is scheduled to be finished in December with manufacturing operations to begin in January. Tyrus O. Jones will be plant manager.

NEW YORK, N. Y.—M. Lowenstein & Sons Inc. reported net earnings of $768,292 on sales of $101 million for the quarter ended September 30. This compares with $1.2 million on sales of $103.3 million for the same period last year. For the nine months to September 30, net profit was $4.6 million on sales of $343 million against $3 million on sales of $328.5 million last year, showing a substantial gain.

GREENSBORO, N. C.—Earnings announced by Burlington Industries Inc., including results of James Lees & Sons Co., rose to an all-time high in the fiscal year ended October 1 despite a substantial decline in the final quarter. A net profit of $35.4 million on sales of $912.9 million was reported against $27.6 million on sales of $805.4 million a year ago. The last quarter profit was $6.6 million compared with $9.3 million for the same period in 1959.

MACON, GA.—Bibb Mfg. Co. has announced the acquisition of all real estate and machinery from Macon Textiles. Robert Train, president, also announced that Bibb Co. had continued its program of renewals and renovations, spending $2.5 million on this work during the last 12 months. Train reported earnings up by 29% over the preceeding year on an increase in sales of only 9%.

AKRON, OHIO—Firestone Tire & Rubber Co. has announced the opening of a new division for the making of nylon filament for use in tires at the Firestone Synthetic Fibers Co. in Hopewell, Va. The Hopewell facility is producing both monofilament and multifilament nylon yarns which will be processed further for tire cord at the company's textile plants. Extensive modernization and expansion, part of the company's over-all $120 million program, has been completed on the plant, which is located on a 250 acre tract. The company reported that this operation will enable it to broaden its research in this field and will also put it in a more advantageous marketing position.

WEST POINT, GA.—West Point Mfg. Co. reported earnings for the fiscal year ending August 27, 1960, after all charges and provision for income taxes, of $8.2 million on sales of $156.9 million marking increases of 35% and 8% respectively. For the same period in 1959, earnings were $6 million on sales of $145.6 million. Sales of goods composed mainly of synthetics totaled $40.5 million or 26% of total consolidated sales. West Point Mfg. Co. entered the 1960 fiscal year with a backlog of orders 59% greater than a year earlier. The new fiscal year showed a reduction of 29% in backlog orders from 1960 which is still second highest in company history. During the year just ended the company spent a record $4.5 million on machinery improvements and expansions. West Point is spending approximately $2.4 million on its Shawmut, Ala., mill to establish a unit for the manufacturing of fine combed yarn fabrics. This operation will have 20,000 spindles and 428 looms.

DURHAM, N. C.—A net profit of $2.1 million on sales of $63.9 million in the fiscal year ended September 30 has been reported by Erwin Mills Inc. This compares with profit of $1.6 million on sales of $70.7 million in the previous fiscal year. The company said that the improved profits reflect a continuation of the better prices which were experienced in the latter part of its 1959 fiscal year. However, recent months have shown a gradual market deterioration in the industry with a decline in the company's volume of orders.

NEW YORK, N. Y.—Riegel Textile Corp. has reported that the consolidated earnings for the fiscal year ending October 1 were $2.4 million on sales of $90.7 million before audit adjustments as compared to $1.8 million on sales of $97.4 million after audit adjustments during the previous fiscal year.

DANVILLE, VA. — Dan River Mills Inc. reports that for the nine months ending October 1, 1960, earnings were approximately 30% higher at $5.2 million than the $3.9 million recorded last year. Sales for the three quarters of 1960 were $119.8 million against $124.9 million for 1959, representing a 4% drop. The company indicated that the extremely heavy forward buying in the latter part of last year, plus the easing of the general business picture, probably were the principal factors in the lower volume of textile fabric sales.

SYLACAUGA, ALA. — Avondale Mills Inc. reports earnings of $2.1 million on sales of $60.7 million for the fiscal year ended August 31. The previous year's earnings were $1.5 million on sales of $61.9 million. Avondale begins the current year with unfilled orders totalling 20.2 million pounds, a decrease of 17% from the beginning of the past fiscal year. The company reports that it has received greater value from its advertising expenditures than ever before. More emphasis is being placed on sales promotion. One Avondale hangtag was used for every 2.5 yards of fabric shipped from the styled fabrics department. The company has budgeted $8.5 million for capital improvements in the next two years. Included in this are: modernization of the Catherine Mills to produce carded knitting sales yarn only; conversion of the Pell City, Ala., plant from blue denim to production of greige goods; installation of additional looms in the Eva Jane Plant in Sylacauga to permit its present production and continuation of denim now being made at Pell City; the addition of 72 box looms at the Birmingham facility; and the equipping of the Sycamore, Ala., plant with ball-bearing spindles and large spinning rings.

BALTIMORE, MD. — Mount Vernon Mills Inc. showed a profit of $300,000 for the third quarter of 1960, while sales declined for the same period. Last year profits were $221,000 for the third quarter. Sales this third quarter were $8.8 million compared with $11.5 million last year. The nine months figures show a profit of $900,000 on sales of $28.8 million against earnings of $713,000 on sales of $34.4 million last year. Thomas M. Bancroft, president, said forward business had continued spotty with a resultant reduction in the unfilled order position of the company.

THOMASTON, GA. — Thomaston Mills is installing 75 new 82-inch Draper XP-2 looms at its Peerless Division. Several of the new looms are in operation and production on them will be scheduled in the near future.

HILLSBORO, N. C.—The Town of Hillsboro has suggested the construction of a sewage disposal plant co-operatively by the Eno Division of Cone Mills Corp. and the Belle-Vue Mfg. Co. to meet stream classification requirements of the N. C. State Stream Sanitation Commission for the Eno River. Under the proposal which will be submitted to the commission for approval, detailed plans for the facility would be submitted by next July 1, with work on the plant to be started by October 1, 1961 and completed by October 1962. The sewage plant would cost some $130,000 and would be able to handle 400,000 gallons a day.

WALPOLE, MASS.—The Kendall Co. has announced that it will shift its textile division headquarters from Walpole to Charlotte, N. C. The division will occupy a new 44,000 square-foot office and laboratory building. The new one-story building will be constructed at a cost of $750,000 and will be completed by Spring 1961, Kendall reports. The company is also planning a $1 million expansion of its Bethune, S. C., finishing plant. The Bethune plant will receive a 52,000-square-foot addition which is expected to be ready for production early in 1961. The expanded plant will more than double its capacity for wash-and-wear finishes. Kendall's recent merger with American Bleach Goods Co. is said to be largely responsible for the need to expand.

WHITMIRE, S. C. — Whitin Machine Works has announced the sale of 96 new Model N Standard spinning frames to J. P. Stevens & Co. for its plant here. The three-inch gauge, 320-spindle, 27-inch wide frames will be used for the production of finer count yarns ranging from 30s to 100s. Whitin points out that for the first time on this model, 60° roll stands will be used. Top rolls and suspension weighting system are of the Unitrol type. Tilt back separators and an improved balloon control ring arrangement will facilitate doffing.

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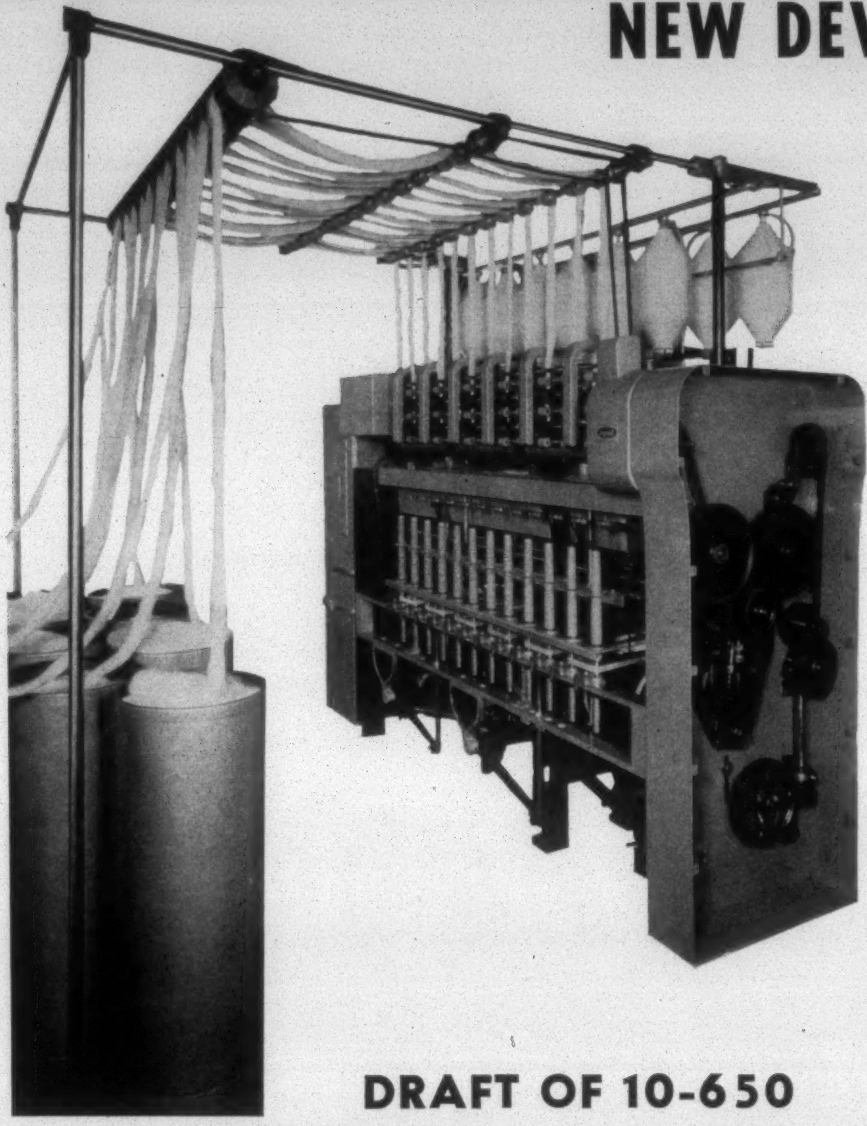

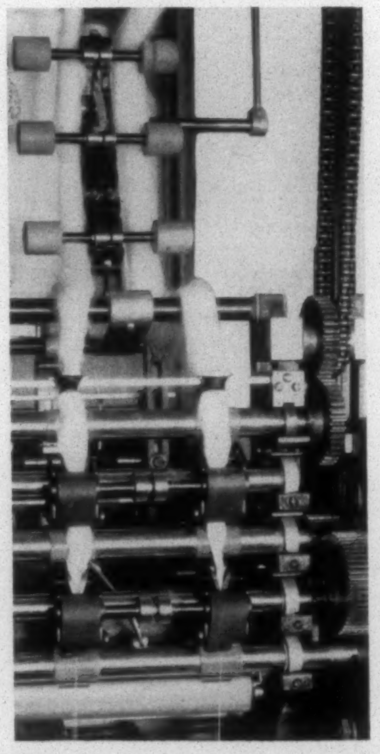

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Vol. 86 **DECEMBER 1960** **No. 12**

textile bulletin

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Inquiry & Reader Service . . . . . . JACQUELINE BOYLES

TEXTILE BULLETIN is devoted to the dissemination of information and the exchange of opinion relative to the spinning and weaving phases of the textile industry, as well as the dyeing and finishing of yarns and woven fabrics. Appropriate material, technical and otherwise, is solicited and paid for at regular rates. Opinions expressed by contributors are theirs and not necessarily those of the editors and publishers. ¶ Circulation rates are: one year payable in advance, $1.50; two years payable in advance, $2.00; one year, Canada, $3.00; one year, other countries in Postal Union, $5.00; single copies, 25 cents. ¶ A companion monthly journal, THE KNITTER, is published by Clark Publishing Co. and devoted to the interests of the knitgoods manufacturing industry.

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A Sign Of The Times

(Reprinted from FORBES *magazine, Nov. 1, 1960)*

AS the South's textile mills started on the cloth for the Spring selling season, a new fiber appeared on the shuttles. It looked like Du Pont's Dacron. It felt like Dacron. Its chemical composition was like Dacron.

But the fiber was not Dacron. It was Fortrel, produced by Fiber Industries Inc. in a brand new plant in Shelby, N. C., with an ultimate annual capacity of 40 million pounds. No small enterprise, Fiber Industries is backed by the capital and technical resources of its joint owners, Britain's Imperial Chemical Industries and Celanese Corp. of America.

Worries In Wilmington

The event caused more than a passing stir in the Wilmington headquarters of E. I. du Pont de Nemours & Co. Fortrel will represent Du Pont's first major competition in the polyester fiber field. For the first time since it introduced nylon back in 1939, Du Pont will be without a major textile "miracle" fiber that it can call strictly its own.

Nylon ceased to be a Du Pont exclusive in 1953. In that year Chemstrand went into volume production of nylon as a Du Pont licensee. Subsequently, American Enka, Industrial Rayon, Allied Chemical and Firestone joined the fray. In 1955 Du Pont began getting competition in acrylic fibers (*e.g.*, Orlon) from Chemstrand.

Still On Top

Not that all this competition ousted Du Pont from first place as supplier of chemical fibers to the textile industry. Last year the Wilmington colossus produced about 60% of the U. S.'s nylon, 66% of its acrylics and over 80% of polyesters.

But being first in a market is not the same as being the sole supplier. Or so at least the figures seem to prove. Du Pont's shipments of nylon have climbed nearly 50% since competition first became serious. But the average price of a pound of nylon has dropped from $2.25 to $1.52.

According to some very persuasive estimates prepared by Analyst Robert W. Farrell for the brokerage house of Faulkner, Dawkins & Sullivan, Du Pont earned some $208 million before taxes on nylon in 1953; this year it will earn about $90 million. Du Pont's nylon profits thus dropped from 52 cents on the sales dollar to around 23 cents.

Even for mighty Du Pont this was a serious blow. The decline worked out to better than $1 a share after taxes. Thus Du Pont earned $6.51 a share from operations in 1956; this year it will do well to earn $6 on considerably higher sales.

Dacron vs. Fortrel

Until this year, however, Du Pont had only relatively minor competition in polyesters. Result: a 1959 production of some 70 million pounds of Dacron, worth around $100 million, contributed some $40 million in profits.

But now Dacron, with Fortrel to contend with, could possibly be in for a squeeze on profits. While the dimensions of the problem are much smaller than in the case of nylon, it could still exert pressure on Du Pont's earnings for several years. Which is one reason why DD common last month was down nearly 100 points, or 34%, from its 1959 high.

Who's Who In Chemical Textile Fibers

Company	Tradename	Estimated Annual Capacity (million lbs.)
Nylon		
Du Pont	nylon	275
Chemstrand	nylon	120-125
Allied Chemical	nylon	20
Firestone	nylon	12
Industrial Rayon	nylon	10
American Enka	nylon	6.5
Acrylics		
Du Pont	Orlon	120
Chemstrand	Acrilan	50
American Cyanamid	Creslan	27
Dow Chemical	Zefran	15
Polyesters		
Du Pont	Dacron	70-75
Eastman Kodak	Kodel	25
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Jan. 14 (Sa)—Board meeting, **SOUTHERN TEXTILE ASSOCIATION**, City Club, Charlotte.

Jan. 21 (Sa)—Piedmont Section, **AMERICAN ASSOCIATION OF TEXTILE CHEMISTS & COLORISTS**, Poinsett Hotel, Greenville, S. C.

Feb. 2-4 (Th-Sa.)—**MATERIAL HANDLING SHORT COURSE**, Georgia Tech, Atlanta (Sponsored by Georgia Tech School of Industrial Engineering and the American Material Handling Society).

Feb. 8 (W)—Annual meeting, **AMERICAN ASSOCIATION FOR TEXTILE TECHNOLOGY**, Hotel Commodore, New York City.

Mar. 16-17 (Th-F)—Textile Engineering Conference, **AMERICAN SOCIETY OF MECHANICAL ENGINEERS**, Clemson College.

Mar. 23-25 (Th-Sa)—Annual meeting, **AMERICAN COTTON MANUFACTURERS INSTITUTE**, Fontainebleau Hotel, Miami Beach, Fla.

Apr. 12-14 (W-F)—Annual meeting, **ALABAMA TEXTILE MANUFACTURERS ASSOCIATION**, Buena Vista Hotel, Biloxi, Miss.

Apr. 16-18 (Su-Tu)—Spring meeting, **NARROW FABRICS INSTITUTE**, The Tides Inn, Irvington, Va.

Apr. 18-19 (Tu-W)—Spring meeting, **TECHNICAL ADVISORY COMMITTEE and BOARD OF TRUSTEES**, Institute of Textile Technology, Charlottesville, Va.

Apr. 22 (Sa)—Spring meeting, **GEORGIA TEXTILE OPERATING EXECUTIVES**, Hightower Building, Georgia Tech, Atlanta.

Apr. 26-29 (W-Sa)—Annual meeting, **GEORGIA TEXTILE MANUFACTURERS ASSOCIATION**, Hollywood Beach Hotel, Hollywood, Fla.

May 6 (Sa)—Spring meeting, **ALABAMA TEXTILE OPERATING EXECUTIVES**, Thach Auditorium, Auburn University, Auburn, Ala. (Slashing and Weaving; Meeting opens 10 a.m.)

May 10-12 (W-F)—Thirty-first annual **NORTH CAROLINA STATEWIDE INDUSTRIAL CONFERENCE**, Jack Tar Hotel, Durham, N. C.

Oct. 28 (Sa)—Fall meeting, **ALABAMA TEXTILE OPERATING EXECUTIVES**, Thach Auditorium, Auburn University, Auburn, Ala. (Carding and Spinning; Meeting opens 10 a.m.)

Nov. 13-15 (M-W)—Fall meeting, **NARROW FABRICS INSTITUTE**, Statler-Hilton Hotel, New York, N. Y.

(M) Monday; (Tu) Tuesday; (W) Wednesday; (Th) Thursday; (F) Friday; (Sa) Saturday

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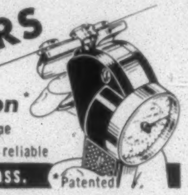

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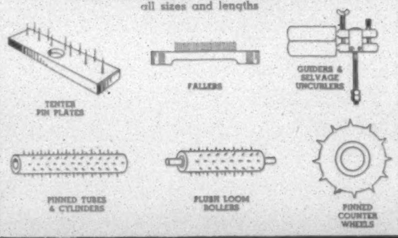

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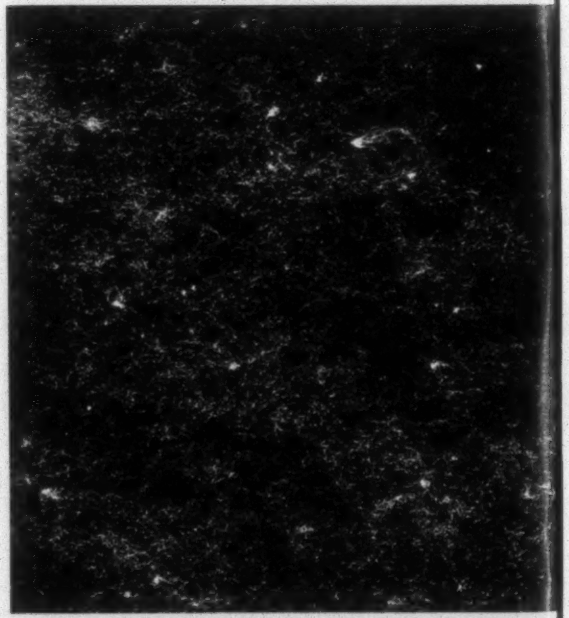

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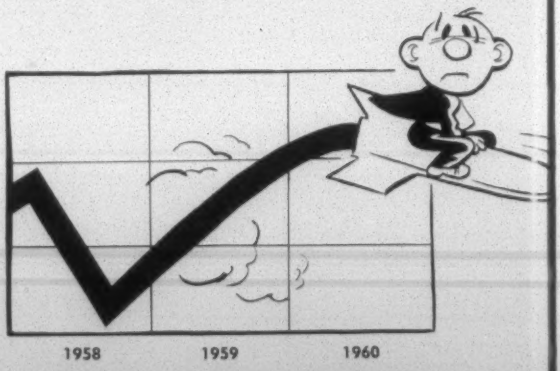

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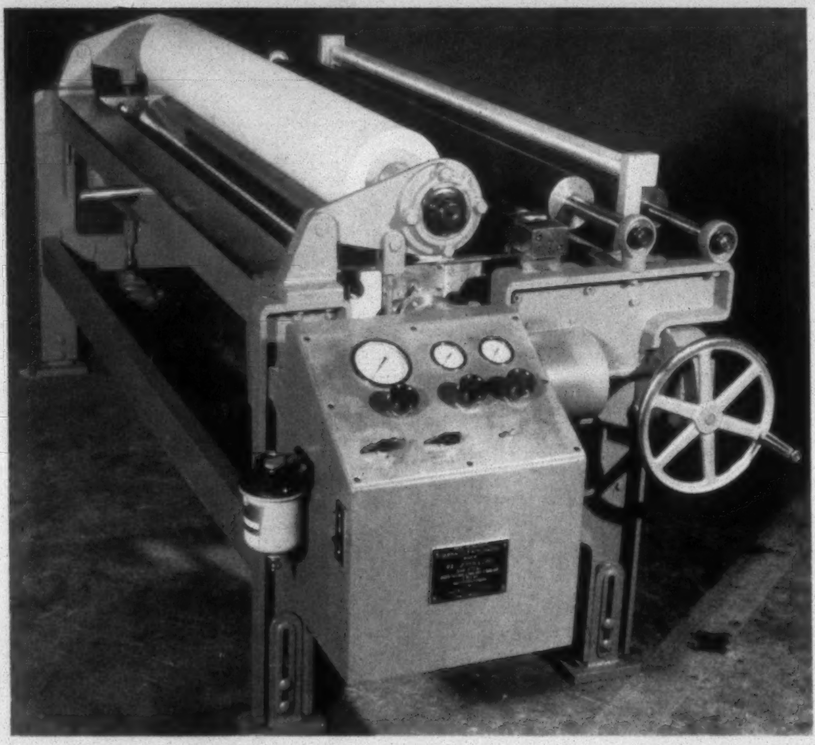

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